

Replicability Instructions for Experiments and Data Analysis:
"Cognition and Behavior in Two-Person Guessing Games: An Experimental Study"
by Miguel Costa-Gomes and Vincent Crawford

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Some of the material needed to replicate our experiments and data analysis is provided in the paper's web appendix, whose table of contents is reproduced here for convenience. This Data Set provides the rest of the required material.

Appendix A. Instructions for Baseline and Robot/Trained Subjects Treatments

Appendix B. Description of Pilots

Appendix C. Preliminary Statistical Tests

Appendix D. Figures Showing Subjects' Aggregate Guess Distributions, Game by Game

Appendix E. Subjects' Guess and Look-up Data

Appendix F. Specification Tests and Analysis of Clusters

Appendix G. Supplementary Tables

Appendix H. Analysis of Search

Data Analysis

Appendix E provides individual subjects' guesses and look-up sequences, game by game, which comprise the data used in our preliminary statistical tests and econometric analysis. Appendix H provides individual subjects' "early" and "late" compliance with types' search implications, computed as explained in Section II.E of the paper. Appendices E and H present the data in the form that seems easiest to read; they are also presented in computationally more convenient forms in this Data Set file as explained below.

(Note that we do not provide look-up duration data; the full set of MouseLab output files, which make it possible to extract data on durations, are too unwieldy to provide here. Our analysis uses only the provided early and late compliance with types' search implications, so this omission does not preclude replication of this paper's results. The duration data will be put into more usable form and provided with the search analysis in CGC (2006).)

The details of the preliminary statistical tests discussed in Section I.A and elsewhere are described in Appendix C.

The Gauss computer programs used in the econometric analysis in Sections II.C and II.E and the specification test and analysis of clusters discussed in Section II.D are as follows. If you are reading this, you have already unzipped the Data Set file. To use the programs you should first store them in the directory C:\GG_AER_2006.

The data files and programs are as follows:

Data Files:

Note: The files with data for guesses (SubjectsGuesses.xls, TypesGuesses.xls, OpponentsGuesses.xls, DominanceRounds.xls) list the games in the order 1, 3, 5, 7, 9, 11, 13, 15, 2, 4, 6, 8, 10, 12, 14, 16 where the numbering is the "master order" of the left-most column in Table 3. The files with data for search (ANADHB0EQ.jnk, ANADHB0TEQ.jnk) list the games in the randomized order in which they were played ("Order Played" in Table 3). The different orders should not cause any problems because the search terms in the likelihood depend only on the total numbers of games in each compliance category, and the likelihood is separable across the guesses terms and the search terms. For the other files (TYPESDTA.GGA, DATISEEQ.jnk, DATISLEQ.jnk) the order of games is irrelevant.

- SubjectsGuesses.xls
(List of subjects' IDs and guesses)
- TypesGuesses.xls
(Types' predicted guesses)
- OpponentsGuesses.xls
(Types' opponents implied predicted guesses)
- DominanceRounds.xls
(Lower and upper bounds of intervals surviving 1, 2, 3, 4, and 5 rounds of iterated deletion of dominated guesses)
- TYPESDTA.GGA
(List with number of guesses that comply (within 0.5) with a type's predicted guesses)
- ANADHB0EQ.jnk
(Subjects' Information search compliance density data for the "early" look-up style, sorted by type and game)
- ANADHB0TEQ.jnk
(Subjects' Information search compliance density data for the "late" look-up style, sorted by type and game)
- DATISEEQ.jnk
(Number of games that fall into each information search compliance category for the "early" look-up style, sorted by type and subject)
- DATISLEQ.jnk
(Number of games that fall into each information search compliance category for the "late" look-up style, sorted by type and subject)

Programs:

a) Using Guesses:

- TypeEstimationAGGWlGOSuNM_Rep.prg
(Estimates subjects' types using guesses only, and performs several hypothesis tests as in Section II.C; computes the likelihood of a subject's guesses given a pseudotype's guesses for all possible pseudotypes used in the specification test reported in Section II.D).

In addition to using the above-mentioned data files, this program can be executed faster if the following input files (also provided) are used (these files have the results of the auxiliary calculations of the numerator and denominator of expression (4)):

(t1TypeEstNumW1.jnk, t2TypeEstNumW1.jnk, t3TypeEstNumW1.jnk,
t4TypeEstNumW1.jnk, t5TypeEstNumW1.jnk, t6TypeEstNumW1.jnk,
t7TypeEstNumW1.jnk)
(g1TypeEstDenW1.jnk, g2TypeEstDenW1.jnk, g3TypeEstDenW1.jnk,
g4TypeEstDenW1.jnk, g5TypeEstDenW1.jnk, g6TypeEstDenW1.jnk,
g7TypeEstDenW1.jnk, g8TypeEstDenW1.jnk, g9TypeEstDenW1.jnk,
g10TypeEstDenW1.jnk, g11TypeEstDenW1.jnk, g12TypeEstDenW1.jnk,
g13TypeEstDenW1.jnk, g14TypeEstDenW1.jnk, g15TypeEstDenW1.jnk,
g16TypeEstDenW1.jnk)

- Counting_Pseudotypes_G.prg
(Part II of the Specification Test, which counts the number of
pseudotypes that beat a subject's estimated type using guesses only)

In addition to the above-mentioned data files, these programs use the
following input files:

PseudotypesLoglikelihoodsW1.jnk
(an output file of TypeEstimationAGGW1GOSuNM_Rep.prg)
TyEstResAGGDGOSuNOMBestTypeW1.jnk
(an output file of TypeEstimationAGGW1GOSuNM_Rep.prg)

b) Using Information Search:

- TypeEstimationAGGDISOSuNM_Rep.prg
(Estimates subjects' types using information search only and
performs several hypotheses tests).

c) Using Guesses and Information Search:

- Sum_IS_and_G.prg
(Estimates subjects' types using guesses and information search as
in Section II.E; includes Part I of the Specification Test, which
rules out type estimates not significantly better than random
behavior.)

In addition to the above-mentioned data files, these programs use the
following input files:

Estimatedloglikelihoods_early_search_alltypes.jnk
(an output file of TypeEstimationAGGDISOSuNM_Rep.prg)
Estimatedloglikelihoods_late_search_alltypes.jnk
(an output file of TypeEstimationAGGDISOSuNM_Rep.prg)
Estimatedloglikelihoods_guesses_alltypes.jnk
(an output file of TypeEstimationAGGW1GOSuNM_Rep.prg)

- Counting_Pseudotypes_GIS.prg
(Counts the number of pseudotypes that beat a subject's guesses-and-
search estimated type as in Part II of the Specification Test)

In addition to the above-mentioned data files, these programs use the
following input files:

PseudotypesLoglikelihoodsW1.jnk
(an output file of TypeEstimationAGGW1GOSuNM_Rep.prg)
TyEstResAGGDGOSuNOMBestTypeW1-GIS.jnk
(an output file of Sum_IS_and_G.prg)

Running the Experiments

To run the two-person guessing game experiments you must first install MouseLab, an ancient but still serviceable DOS-based program. The MouseLab program and instructions can be downloaded at <http://www.cebiz.org/mouselab.htm>. (See also the new, web-based version linked on that page.) You must then create input files and output files as described in the manual `mouselab.pdf`. MouseLab can be run manually, but it is more convenient to create batch files.

We copy here the text input, output, and batch files for the two phases (Instructions, which has no output file; and Experiment) of our Baseline treatment. (Some reformatting of line breaks may be needed to make MouseLab run properly.) The files for our other treatments (Open Boxes and the six Robot/Trained Subjects) are analogous, and can be reconstructed from the information in Appendix A of the paper. A full or partial set of the original text files will be supplied on request to the authors.

(To create your own MouseLab applications, you must create new input and output files as described in the manual `mouselab.pdf`.)

Once MouseLab is installed, with input, output, and batch files, to run our Baseline experiment you click on the Instructions batch file (e.g. `GUIB.bat` below) and then the Experiment batch file (`GUEB.bat` below). Our treatments also had subject handouts, keyed to be read along with subjects' computer screens, whose contents are reproduced in Appendix A's Instructions. The Mouselab files and the handouts together provide a complete script for the experiment.

If you wish to exit MouseLab before finishing, press control-backspace and then click on the highlighted box at the bottom of the screen at the next opportunity.

MouseLab Batch File for Baseline Instructions Phase `GUIB.bat`:

```
@echo off
mouselab 32 vga GUIB.inp nul
goto :End
:Usage
echo Usage:
echo COLUMN
:End
```

MouseLab Input File for Baseline Instructions Phase `GUIB.inp`:

```
@begin<file>
@comment<Baseline Instructions file, 20 February 02>
@comment<global command>
@set<clickon = on>
@begin<text>
@comment<Baseline screen 1. Introduction>
@begin<screentext>
```

WELCOME!

PLEASE WAIT UNTIL THE EXPERIMENTER TELLS YOU TO START

You are about to participate in an experiment in decision making. Universities and research foundations have provided the funds for this experiment. If you follow the instructions and pass the Understanding Test, you will be allowed to continue in the experiment. Depending on your

decisions, you may then earn a considerable additional amount of money, from \$0 to \$60.

Your additional earnings will be determined by your decisions and the decisions of other participants in the experiment. Before making your decisions, you will have the opportunity to gather information about how your earnings and other participants' earnings depend on your and their decisions.

All the money that you earn is yours to keep, and will be paid to you in private, in cash, after today's session.

(Click on the bar at the bottom of this screen to move on to the next screen)

@end<screentext>

@end<text>

@begin<text>

@comment<Baseline screen 2. Silence>

@begin<screentext>

You may not write during the experiment, except when you are specifically told that you may write during the instructions. It is also important to remain silent and not to look at other people's work. If you have any questions or need assistance of any kind, please raise your hand, and an experimenter will come to you. Otherwise, if you write when it is not allowed, talk, laugh, exclaim out loud, etc., YOU WILL BE ASKED TO LEAVE. Thank you.

(Click on the bar at the bottom of this screen to move on to the next screen)

@end<screentext>

@end<text>

@begin<text>

@comment<Baseline screen 3. Games and motivation>

@begin<screentext>

The experiment has 16 rounds. In each round, you will be matched with one of the other participants, a new one in each round. You will not know which of the other participants you are matched with, and your identity and the identities of the other participants will never be revealed.

Each round concerns a DECISION SITUATION in which you and another person we will call "s/he" (which will refer to a new person each round) separately and independently make decisions called GUESSES. Together, your and her/his guesses determine the numbers of POINTS that you and s/he earn in a round, which may be different.

Neither your nor her/his guess in a round will affect how you or the other participants are matched or the decision situations they face in the rest of the experiment.

EARNING MORE POINTS WILL INCREASE YOUR MONEY PAYMENT
AT THE END OF THE EXPERIMENT, AS EXPLAINED BELOW.

(Click on the bar at the bottom of this screen to move on to the next screen)

@end<screentext>

@end<text>

@begin<text>

@comment<Baseline screen 4. Targets and limits, information>

@begin<screentext>

To choose your guesses, it may help you to understand how your and her/his guesses will determine the numbers of points that you and s/he earn in the decision situations.

In each decision situation, each person has her/his own TARGET, LOWER LIMIT, and UPPER LIMIT. These targets and limits may be different for you and her/him, and they may change from round to round. Otherwise, the decision situations are identical in all 16 rounds.

Your and her/his targets, lower limits, and upper limits will be presented to you and her/him on your computer screens, as explained below. Both you and s/he will receive the same instructions and have the same information about the decision situations and the same access to your and her/his targets and limits.

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@begin<text>
@comment<Baseline screen 5. Determination of point payoffs>
@begin<screentext>
Once you and s/he have chosen your guesses, your (respectively, her/his) guess is automatically adjusted to stay within your (her/his) limits as explained below.

After this adjustment, you earn whichever is larger, either 0 points or 200 points minus the distance between YOUR adjusted guess and the product of YOUR target times HER/HIS adjusted guess, PLUS whichever is larger, either 0 points or 100 points minus one-tenth (1/10th) the distance between YOUR adjusted guess and the product of YOUR target times HER/HIS adjusted guess.

S/he earns whichever is larger, either 0 points or 200 points minus the distance between HER/HIS adjusted guess and the product of HER/HIS target times YOUR adjusted guess, PLUS whichever is larger, either 0 points or 100 points minus one-tenth (1/10th) the distance between HER/HIS adjusted guess and the product of HER/HIS target times YOUR adjusted guess.

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@begin<text>
@comment<Baseline screen 6. Determination of point payoffs, continued>
@begin<screentext>
This way of determining the number of points that you and s/he earn makes the number you earn larger, the closer your adjusted guess is to your target times her/his adjusted guess; and it makes the number s/he earns larger, the closer her/his adjusted guess is to her/his target times your adjusted guess.

(Reducing the distance by 10 increases the number of points by 11 when the distance is less than 200, and by 1 when the distance is between 200 and 1000; and it never decreases the number of points.)

Only the distance matters, NOT whether the difference is positive or negative. You earn the same number of points when your adjusted guess is too high by a given amount as when it is too low by the same amount.

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@begin<text>
@comment<Baseline screen 7. Adjustment of guesses to limits>
@begin<screentext>
To pass the Understanding Test and TO BE ABLE to participate in the experiment, it is important to understand how your (respectively, her/his) guesses will be ADJUSTED to stay within your (her/his) limits. This will be done as follows. If your guess is below your lower limit, then your guess is adjusted UP to your LOWER limit; and if your guess is above your upper limit, then your guess is adjusted DOWN to your UPPER limit.

If, for example, your lower limit is 400 and you guess 300, then your guess is adjusted up to 400. If your upper limit is 600 and you guess 900, then your guess is adjusted down to 600.

Her/his guesses are adjusted up or down to her/his lower or upper limits in the same way, except that her/his limits may be different.

If the explanation above is not clear, please raise your hand and the experimenter will answer your questions.

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@begin<text>
@comment<Baseline screen 8. Adjustment automatic>
@begin<screentext>
This adjustment is AUTOMATIC. Neither you nor s/he is required to enter guesses between your limits. If, in the previous example, you wish to guess your lower limit of 400, guessing 300 works just as well, and leads to the same outcome, as guessing 400.

Both you and s/he will have access to enough information to allow you to figure out whether your or her/his guesses will be adjusted, and by how much, if you wish to do so. But neither you nor s/he will be given any indication of adjustments during the experiment, if they occur.

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@begin<text>
@comment<Baseline screen 9. Introduction to sample screen display>
@begin<screentext>

SAMPLE DECISION SITUATION

In each decision situation, your and her/his targets, lower limits, and upper limits will be hidden in "closed" boxes on your screen. Before you and s/he choose your guesses, you will both have enough time to open the boxes and look up your and her/his targets and limits, as explained below.

The next screen displays your and her/his targets, lower limits, and upper limits in a sample decision situation, with the boxes open. THIS SITUATION

IS ONLY AN ILLUSTRATION. In the decision situations in the experiment, the targets and limits may be different, and the boxes will be closed unless you open them, as explained below. The situations will change from round to round, so that in each round you and s/he will have new targets and limits. However, the numbers of points that you and s/he earn will always depend on your and her/his guesses, targets, and limits exactly as in this sample situation.

AS YOU LOOK AT THIS SITUATION, READ THE FIRST PAGE AND A HALF OF THE PRINTED HANDOUT. THEN MOVE ON TO THE NEXT SCREEN BY CLICKING THE BOX "MOVE ON." DO NOT BEGIN THE UNDERSTANDING TEST BEFORE YOU ARE INSTRUCTED ON THE SCREEN TO DO SO.

(Click on the bar at the bottom of this screen to move on to the next screen)

@end<screentext>

@end<text>

@repeat

@begin<matrix>

@comment<Baseline screen 10. Sample screen display with boxes open, no response>

@set<boxes=on>@set<alternatives = 2; attributes = 3>

@set<responsemode = boxes>

@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >

@SET<ATTR[1]="LOWER LIMIT " ;ATTR[2]="TARGET " ;ATTR[3]="UPPER LIMIT">

@set<box[1,1]="400";box[1,2]="0.8";box[1,3]="600";

box[2,1]="200";box[2,2]="0.8"; box[2,3]="800">

@set<responses = 1>

@set<response[1]="Move on">

@end<matrix>

@begin<text>

@comment<Baseline screen 11. Entering and confirming guesses>

@begin<screentext>

ENTERING AND CONFIRMING GUESSES

To complete a round and go on to the next round, you must ENTER and CONFIRM a guess.

To enter a guess, use the mouse to POINT AT (move the cursor into) the box beneath "Enter your guess" near the bottom of the screen labeled "Keyboard Entry" and click either button on the mouse. You will then be prompted: "Type Response". Type your guess (a whole number or decimal from 0 to 1000), which will appear in a new box to the right of the box you clicked. Then press the "Enter" key. The guess you typed will now appear in a box labeled "Current Response" further to the right.

If you would like to change your guess, point at the "Keyboard Entry" box again, click the mouse, and proceed as before. When you are ready to confirm your guess, use the mouse to point at the box at the bottom labeled "Enter this box and click a mouse button when you are ready" and click the mouse. The interface will then go on to the next round.

ONCE YOU HAVE CONFIRMED YOUR GUESS FOR A ROUND,
YOU WILL NOT BE ABLE TO CHANGE YOUR GUESS FOR THAT ROUND.

(Click on the bar at the bottom of this screen to move on to the next screen)

@end<screentext>

@end<text>


```
@begin<text>
@comment<Baseline screen 12. Acceptable guesses>
@begin<screentext>
The interface will accept any guess (whole number or decimal) from 0 to 1000.
However, if you try to enter a number that is not from 0 to 1000, the interface
will either crash or make you start the decision situation over.
```

TO AVOID THIS, WE ASK YOU TO BE CAREFUL TO ENTER ONLY
WHOLE NUMBERS OR DECIMALS FROM 0 TO 1000.

```
(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>
```

```
@begin<text>
@comment<Baseline screen 13. Introduction to sample screen display with boxes open
and a box for entering guesses>
@begin<screentext>
```

SAMPLE DECISION SITUATION WITH A BOX FOR ENTERING YOUR GUESS

The next screen display is the same as before, but now with a box for entering
your guess at the bottom of the screen.

FOR PRACTICE, ENTER A GUESS. THEN EITHER CONFIRM YOUR GUESS OR,
IF YOU WISH, CHANGE IT AND THEN CONFIRM YOUR NEW GUESS.

Raise your hand if you have questions.

```
(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>
```

```
@repeat
@begin<matrix>
@set<boxes=on>
@comment<Baseline screen 14. Sample screen display with boxes open and a box for
entering guesses>
@set<alternatives = 2; attributes = 3>
@set<responsemode = keyboard>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]="HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="400";box[1,2]="0.8";box[1,3]="600";
box[2,1]="200";box[2,2]="0.8"; box[2,3]="800">
@set<responseline="Enter your guess (a number from 0 to 1000).">
@end<matrix>
```

```
@declare<real : %d1>
@assign<%d1=%lresponse>
@if<%d1#lt#0>
@assign<%d1=1001>
@end_if
@if<%d1#gt#1000>
@assign<%d1=1001>
@end_if
@if<%d1#eq#1001>
@begin<text>
```

```

@begin<screentext>
    The guess you entered is not valid.

    We ask you to enter a number from 0 to 1000.
@end<screentext>
@end<text>
@end_if

@until<(%dl)#lt#1001>

@begin<text>
@comment<Baseline screen 15. Introduction to Understanding Test>
@begin<screentext>
    UNDERSTANDING TEST

    You will now take an UNDERSTANDING TEST. After you finish the test, it will
    be graded.

    YOU WILL ONLY BE ALLOWED TO CONTINUE IN THE EXPERIMENT
    IF YOU HAVE ANSWERED ALL OF THE QUESTIONS CORRECTLY.

    You may write during the Understanding Test, but you will NOT be allowed to
    write during the decision situations in the experiment.

    PLEASE TURN TO THE SECOND HALF OF PAGE 2 OF THE HANDOUT, WHICH CONTAINS
    THE TEST QUESTIONS. THEN MOVE ON TO THE NEXT SCREEN, WHICH CONTAINS THE
    DECISION SITUATION FOR THE UNDERSTANDING TEST, AND BEGIN THE TEST.

    (Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@repeat
@begin<matrix>
@comment<Baseline screen 16. Decision situation for Understanding Test, boxes
open>
@set<boxes=on>
@set<alternatives = 2; attributes = 3>
@set<responsemode = keyboard>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]="HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="200";box[1,2]="1.2";box[1,3]="600";
box[2,1]="400";box[2,2]="0.8"; box[2,3]="800">
@set<responseline="Enter your guess (a number from 0 to 1000).">
@end<matrix>

@declare<real : %dl>
@assign<%dl=%lresponse>
@if<%dl#lt#0>
@assign<%dl=1001>
@end_if
@if<%dl#gt#1000>
@assign<%dl=1001>
@end_if
@if<%dl#eq#1001>
@begin<text>

```

@begin<screentext>

The guess you entered is not valid.

We ask you to enter a number from 0 to 1000.

@end<screentext>

@end<text>

@end_if

@until<(%dl)#lt#1001>

@begin<text>

@comment<Baseline screen 17. Closed-boxes explanation>

@begin<screentext>

CLOSED BOXES

In the decision situations in the experiment, you and s/he will have new targets, lower limits, and upper limits in each round. Their values will vary independently between you and her/him and from round to round, so you will not be able to figure out one value from the other values, either in the current decision situation or in any future situation.

The values of your and her/his targets, lower limits, and upper limits will not be openly displayed. Instead they will be hidden in "closed" boxes on your screens. You will be able to open any box just by POINTING AT (moving the cursor into) it with the mouse and LEFT-clicking the mouse.

You may open as many or as few boxes as you wish, as often and for as long as you wish, in any order. However, you may open only one box at a time. Before you can open a new box, you will have to close the previous box by RIGHT-clicking the mouse; this works no matter where the cursor is on your screen.

(Click on the bar at the bottom of this screen to move on to the next screen)

@end<screentext>

@end<text>

@begin<text>

@comment<Baseline screen 18. Closed-boxes explanation, continued>

@begin<screentext>

During the decision situations in the experiment, YOU ARE NOT ALLOWED TO WRITE.

If you do not remember the number in a box whose value you would like to know, just open the box again.

If you have trouble doing calculations, we have lent you a hand calculator or a printed multiplication table for the targets and (whole number) guesses.

(Click on the bar at the bottom of this screen to move on to the next screen)

@end<screentext>

@end<text>

@begin<text>

@comment<Baseline screen 19. Introduction to sample screen display with boxes closed>

@begin<screentext>

SAMPLE DECISION SITUATION WITH BOXES CLOSED

The next screen presents the same display as before, but with the boxes closed.

USE THE MOUSE TO PRACTICE OPENING AND CLOSING BOXES UNTIL YOU FEEL COMFORTABLE WITH THE PROCEDURE. THEN MOVE ON TO THE FOLLOWING SCREEN BY ENTERING A GUESS (ANY WHOLE NUMBER OR DECIMAL FROM 0 TO 1000) AND CONFIRMING IT.

For further explanation, raise your hand.

(Click on the bar at the bottom of this screen to move on to the next screen)

@end<screentext>

@end<text>

@repeat

@begin<matrix>

@comment<Baseline screen 20. Sample screen display with boxes closed (otherwise same as screen 14)>

@set<alternatives = 2; attributes = 3>

@set<responsemode = keyboard>

@SET<ALT[1]=" Your Limits&Target"; ALT[2]="HerHis Limits&Target" >

@SET<ATTR[1]="LOWER LIMIT " ;ATTR[2]="TARGET " ;ATTR[3]="UPPER LIMIT">

@set<box[1,1]="400";box[1,2]="0.8";box[1,3]="600";

box[2,1]="200";box[2,2]="0.8"; box[2,3]="800">

@set<responseline="Enter your guess (a number from 0 to 1000).">

@end<matrix>

@declare<real : %dl>

@assign<%dl=%lresponse>

@if<%dl#lt#0>

@assign<%dl=1001>

@end_if

@if<%dl#gt#1000>

@assign<%dl=1001>

@end_if

@if<%dl#eq#1001>

@begin<text>

@begin<screentext>

The guess you entered is not valid.

We ask you to enter a number from 0 to 1000.

@end<screentext>

@end<text>

@end_if

@until<(%dl)#lt#1001>

@begin<text>

@comment<Baseline screen 21. Intermediate screen>

@begin<screentext>

INTERMEDIATE SCREEN

After each round, you will see a screen telling you to proceed to the next round only when you are ready. If you wish, you may rest before proceeding. However, we ask you not to rest DURING a round.

(Click on the bar at the bottom of this screen to move on to the next screen)

@end<screentext>

@end<text>

@begin<text>
@comment<Baseline screen 22. Money payment>
@begin<screentext>

MONEY PAYMENT

Once you have confirmed your guess for a round, you will not be able to change your guess for that round. After you have chosen your guesses for all 16 rounds, your money payment will be determined according to the number of points you earned, given your and the other participants' guesses, as follows:

Five of the 16 rounds will be selected at random, and you will be paid \$0.04 per point for your points earned in those rounds. The rounds will be selected as follows. Tokens numbered 1 to 16 will be placed in a container and shaken. You will then draw five tokens at random, and the numbers you draw will be the rounds for which you are paid for your points.

Suppose, for example, that in the five rounds selected at random, you earned a total of 1000 points. At \$0.04 per point you would then receive \$40.

All the money that you earn is yours to keep, and will be paid to you in private, in cash, after today's session.

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@begin<text>
@comment<Baseline screen 23. Introduction to practice rounds>
@begin<screentext>

PRACTICE ROUNDS

Before you start making guesses in the decision situations in the experiment for money, you will have the opportunity to practice for four rounds. These practice rounds are only sample decision situations. You will NOT be paid for them, and in the decision situations in the experiment your and her/his targets and limits may be different. You may write during the practice rounds, but you will NOT be allowed to write during the decision situations in the experiment.

TURN TO PAGE 3 OF YOUR HANDOUT, HEADED "PRACTICE ROUNDS".
THEN MOVE ON TO THE FOUR PRACTICE ROUNDS, AND WRITE DOWN YOUR GUESS
FOR EACH ROUND BEFORE MOVING ON TO THE NEXT ROUND.

WHEN YOU HAVE FINISHED ALL FOUR PRACTICE ROUNDS,
PLEASE RAISE YOUR HAND UNTIL THE EXPERIMENTER SEES YOU.

DO NOT GO ON TO THE NEXT SCREEN UNTIL HE HAS COLLECTED PAGE 3 OF
YOUR HANDOUT AND YOU ARE INSTRUCTED TO CONTINUE.

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@begin<text>
@comment<Baseline screen 24. Practice round 1, boxes closed>
@begin<screentext>
The next screen displays the decision situation for Practice Round 1.

DO NOT MOVE ON TO ROUND 2 BEFORE YOU HAVE WRITTEN DOWN YOUR GUESS FOR ROUND 1.
@end<screentext>
@end<text>

@repeat
@begin<matrix>
@set<alternatives = 2; attributes = 3>
@set<responsemode = boxes>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT " ;ATTR[2]="TARGET " ;ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="200";box[1,2]="1.2";box[1,3]="800";
box[2,1]="400";box[2,2]="1.2"; box[2,3]="600">
@set<responseline="Practice Round 1">
@set<responses = 1>
@set<response[1]="Move on">
@end<matrix>

@begin<text>
@comment<Baseline screen 25. Practice round 2, boxes closed>
@begin<screentext>
The next screen displays the decision situation for Practice Round 2.

DO NOT MOVE ON TO ROUND 3 BEFORE YOU HAVE WRITTEN DOWN YOUR GUESS FOR ROUND 2.
@end<screentext>
@end<text>

@repeat
@begin<matrix>
@set<alternatives = 2; attributes = 3>
@set<responsemode = boxes>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT " ;ATTR[2]="TARGET " ;ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="400";box[1,2]="0.8";box[1,3]="600";
box[2,1]="400";box[2,2]="1.2"; box[2,3]="800">
@set<responseline="Practice Round 2">
@set<responses = 1>
@set<response[1]="Move on">
@end<matrix>

@begin<text>
@comment<Baseline screen 26. Practice round 3, boxes closed>
@begin<screentext>
The next screen displays the decision situation for Practice Round 3.

DO NOT MOVE ON TO ROUND 4 BEFORE YOU HAVE WRITTEN DOWN YOUR GUESS FOR ROUND 3.
@end<screentext>
@end<text>

@repeat
@begin<matrix>
@set<alternatives = 2; attributes = 3>
@set<responsemode = boxes>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT " ;ATTR[2]="TARGET " ;ATTR[3]="UPPER
LIMIT">

```

@set<box[1,1]="400";box[1,2]="1.2";box[1,3]="800";
box[2,1]="400";box[2,2]="0.8"; box[2,3]="600">
@set<responseline="Practice Round 3">
@set<responses = 1>
@set<response[1]="Move on">
@end<matrix>

@begin<text>
@comment<Baseline screen 27. Practice round 4, boxes closed>
@begin<screentext>
The next screen displays the decision situation for Practice Round 4.

WRITE DOWN YOUR GUESS FOR ROUND 4 AND THEN MOVE ON TO THE FOLLOWING SCREEN.
@end<screentext>
@end<text>

@repeat
@begin<matrix>
@set<alternatives = 2; attributes = 3>
@set<responsemode = boxes>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="400";box[1,2]="1.2";box[1,3]="600";
box[2,1]="200";box[2,2]="1.2"; box[2,3]="800">
@set<responseline="Practice Round 4">
@set<responses = 1>
@set<response[1]="Move on">
@end<matrix>

@begin<text>
@comment<Baseline screen 28. Finale>
@begin<screentext>
You have now completed the Practice Rounds.

PLEASE RAISE YOUR HAND UNTIL THE EXPERIMENTER SEES YOU,
AND REMAIN IN YOUR SEAT.

An experimenter will come to collect your handout.

YOU WILL THEN TAKE A SHORT BREAK, IN YOUR SEAT, BEFORE CONTINUING.
DO NOT GO ON BEFORE YOU ARE INSTRUCTED TO CONTINUE.

(Click on the bar at the bottom of this screen to exit the instructions)
@end<screentext>
@end<text>
@end<file>

```

MouseLab Batch File for Baseline Experiment Phase GUEB.bat:

```

@echo off
mouselab 32 vga GUEB.inp GUBxy.out
goto :End
:Usage
echo Usage:
echo COLUMN
:End

```

MouseLab Input File for Baseline Experiment Phase GUEB.inp:

```
@begin<file>
@comment<Baseline Experiment file, 28 Jan 02>
@comment<global command>
@set<clickon = on>
@begin<text>
@comment<ExperB screen 1. Initial screen>
@begin<screentext>

                WELCOME BACK!

        PLEASE WAIT UNTIL THE EXPERIMENTER TELLS YOU TO START

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@begin<text>
@comment<ExperB screen 2. Review>
@begin<screentext>
We will now have a brief review, in preparation for the decision situations
in the experiment.

It is important to remain silent and not to look at other people's work. If you
have any questions or need assistance of any kind, please raise your hand, and
an experimenter will come to you.

You may NOT write during the rest of the experiment. If you do not remember the
number in a box whose value you would like to know, just open the box again. If
you have trouble doing calculations, we have lent you a hand calculator or
a printed multiplication table for the targets and (whole number) guesses.

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@begin<text>
@comment<ExperB screen 3. Review, continued>
@begin<screentext>
In each of the 16 rounds of the experiment, you will be matched with one of
the other participants, a new one in each round. You will not know which other
participants you are matched with, and your identity and the identities of the
other participants will never be revealed.

Each round concerns a DECISION SITUATION in which you and another person we
will call "s/he" (which will refer to a new person each round) separately and
independently make decisions called GUESSES. Together, your and her/his
guesses determine the numbers of POINTS that you and s/he earn in a round,
which may be different.

After you have confirmed your guess for a round, you cannot change your guess
for that round. Neither your nor her/his guess in a round will affect how you
or the other participants are matched or the decision situations they face in
the rest of the experiment.

(Click on the bar at the bottom of this screen to move on to the next screen)
```


@end<screentext>
@end<text>

@begin<text>
@comment<ExperB screen 4. Review, continued>
@begin<screentext>

The decision situations are identical for everyone, except that each person has her/his own TARGET, LOWER LIMIT, and UPPER LIMIT in each round. These targets and limits may be different for you and her/him, and they may change from round to round. Both you and s/he receive the same instructions and information about the decision situations and have the same access to your and her/his targets and limits on your computer screens.

After each round, the computer will automatically record your and her/his guesses. If necessary, your (respectively, her/his) guess will be automatically adjusted up to your (her/his) lower limit or down to your (her/his) upper limit. However, neither you nor s/he will be given any indication of adjustments during the experiment, if they occur.

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@begin<text>
@comment<ExperB screen 5. Review, continued>
@begin<screentext>
In each round, you will earn whichever is larger, either 0 points or 200 points minus the distance between YOUR adjusted guess and the product of YOUR target times HER/HIS adjusted guess, PLUS whichever is larger, either 0 points or 100 points minus one-tenth (1/10th) the distance between YOUR adjusted guess and the product of YOUR target times HER/HIS adjusted guess. S/he will earn whichever is larger, either 0 points or 200 points minus the distance between HER/HIS adjusted guess and the product of HER/HIS target times YOUR adjusted guess, PLUS whichever is larger, either 0 points or 100 points minus one-tenth (1/10th) the distance between HER/HIS adjusted guess and the product of HER/HIS target times YOUR adjusted guess.

This way of determining the number of points that you and s/he earn makes the number you earn larger, the closer your adjusted guess is to your target times her/his adjusted guess; and makes the number s/he earns larger, the closer her/his adjusted guess is to her/his target times your adjusted guess. Neither you nor s/he will be told your point earnings until after the entire experiment is completed. EARNING MORE POINTS INCREASES YOUR MONEY PAYMENT AT THE END OF THE EXPERIMENT, AS WE HAVE EXPLAINED.

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@begin<text>
@comment<ExperB screen 6. Start of Experiment>
@begin<screentext>

You are now ready to start the 16 decision situations in the experiment. After each round, you will see a screen telling you to proceed to the next round only when you are ready. If you wish, you may rest before proceeding. However, we ask you not to rest DURING a round.

```

(Click on the bar at the bottom of this screen to start the experiment)
@end<screentext>
@end<text>

@begin<text>
@begin<screentext>

                                ROUND  1

                                PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@repeat
@begin<matrix>
@comment<Exper Screen 7. Game Beta_4+Gamma_2>
@set<alternatives = 2; attributes = 3>
@set<responsemode = keyboard>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="100";box[1,2]="1.5";box[1,3]="900";
box[2,1]="300";box[2,2]="0.7"; box[2,3]="500">
@set<responseline="Enter your guess (a number from 0 to 1000).">
@end<matrix>

@declare<real : %d1>
@assign<%d1=%lresponse>
@if<%d1#lt#0>
@assign<%d1=1001>
@end_if
@if<%d1#gt#1000>
@assign<%d1=1001>
@end_if
@if<%d1#eq#1001>
@begin<text>
@begin<screentext>

                                The guess you entered is not valid.

                                We ask you to enter a number from 0 to 1000.

@end<screentext>
@end<text>
@end_if
@until<(%d1)#lt#1001>

@begin<text>
@begin<screentext>

                                ROUND  2

                                PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@repeat

```

```

@begin<matrix>
@comment<Exper Screen 9. Game Delta_3+Gamma_4>
@set<alternatives = 2; attributes = 3>
@set<responsemode = keyboard>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="300";box[1,2]="1.3";box[1,3]="900";
box[2,1]="300";box[2,2]="1.5"; box[2,3]="500">
@set<responseline="Enter your guess (a number from 0 to 1000).">
@end<matrix>

```

```

@declare<real : %d1>
@assign<%d1=%lresponse>
@if<%d1#lt#0>
@assign<%d1=1001>
@end_if
@if<%d1#gt#1000>
@assign<%d1=1001>
@end_if
@if<%d1#eq#1001>
@begin<text>
@begin<screentext>

```

The guess you entered is not valid.

We ask you to enter a number from 0 to 1000.

```

@end<screentext>
@end<text>
@end_if
@until<(%d1)#lt#1001>

```

```

@begin<text>
@begin<screentext>

```

ROUND 3

PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

```

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

```

```

@repeat
@begin<matrix>
@comment<Exper Screen 11. Game Delta_3+Delta_3>
@set<alternatives = 2; attributes = 3>
@set<responsemode = keyboard>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="300";box[1,2]="1.3";box[1,3]="900";
box[2,1]="300";box[2,2]="1.3"; box[2,3]="900">
@set<responseline="Enter your guess (a number from 0 to 1000).">
@end<matrix>

```

```

@declare<real : %d1>
@assign<%d1=%lresponse>
@if<%d1#lt#0>

```

```

@assign<%d1=1001>
@end_if
@if<%d1#gt#1000>
@assign<%d1=1001>
@end_if
@if<%d1#eq#1001>
@begin<text>
@begin<screentext>
        The guess you entered is not valid.

        We ask you to enter a number from 0 to 1000.
@end<screentext>
@end<text>
@end_if
@until<(%d1)#lt#1001>

@begin<text>
@begin<screentext>
        ROUND 4

        PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

        (Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@repeat
@begin<matrix>
@comment<Exper Screen 13. Game Delta_2+ Beta_3>
@set<alternatives = 2; attributes = 3>
@set<responsemode = keyboard>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="300";box[1,2]="0.7";box[1,3]="900";
box[2,1]="100";box[2,2]="1.3"; box[2,3]="900">
@set<responseline="Enter your guess (a number from 0 to 1000).">
@end<matrix>

@declare<real : %d1>
@assign<%d1=%lresponse>
@if<%d1#lt#0>
@assign<%d1=1001>
@end_if
@if<%d1#gt#1000>
@assign<%d1=1001>
@end_if
@if<%d1#eq#1001>
@begin<text>
@begin<screentext>
        The guess you entered is not valid.

        We ask you to enter a number from 0 to 1000.
@end<screentext>
@end<text>
@end_if

```

```
@until<(%d1)#lt#1001>
```

```
@begin<text>
```

```
@begin<screentext>
```

ROUND 5

PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

```
@end<screentext>
```

```
@end<text>
```

```
@repeat
```

```
@begin<matrix>
```

```
@comment<Exper Screen 15. Game Alpha_4+ Alpha_2>
```

```
@set<alternatives = 2; attributes = 3>
```

```
@set<responsemode = keyboard>
```

```
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
```

```
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER  
LIMIT">
```

```
@set<box[1,1]="100";box[1,2]="1.5";box[1,3]="500";
```

```
box[2,1]="100";box[2,2]="0.7"; box[2,3]="500">
```

```
@set<responseline="Enter your guess (a number from 0 to 1000).">
```

```
@end<matrix>
```

```
@declare<real : %d1>
```

```
@assign<%d1=%lresponse>
```

```
@if<%d1#lt#0>
```

```
@assign<%d1=1001>
```

```
@end_if
```

```
@if<%d1#gt#1000>
```

```
@assign<%d1=1001>
```

```
@end_if
```

```
@if<%d1#eq#1001>
```

```
@begin<text>
```

```
@begin<screentext>
```

The guess you entered is not valid.

We ask you to enter a number from 0 to 1000.

```
@end<screentext>
```

```
@end<text>
```

```
@end_if
```

```
@until<(%d1)#lt#1001>
```

```
@begin<text>
```

```
@begin<screentext>
```

ROUND 6

PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

```
@end<screentext>
```

```
@end<text>
```

```
@repeat
```

```
@begin<matrix>
```

```
@comment<Exper Screen 17. Game Alpha_2+ Beta_1>
```

```

@set<alternatives = 2; attributes = 3>
@set<responsemode = keyboard>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="100";box[1,2]="0.7";box[1,3]="500";
box[2,1]="100";box[2,2]="0.5"; box[2,3]="900">
@set<responseline="Enter your guess (a number from 0 to 1000).">
@end<matrix>

```

```

@declare<real : %d1>
@assign<%d1=%lresponse>
@if<%d1#lt#0>
@assign<%d1=1001>
@end_if
@if<%d1#gt#1000>
@assign<%d1=1001>
@end_if
@if<%d1#eq#1001>
@begin<text>
@begin<screentext>

```

The guess you entered is not valid.

We ask you to enter a number from 0 to 1000.

```

@end<screentext>
@end<text>
@end_if
@until<(%d1)#lt#1001>

```

```

@begin<text>
@begin<screentext>

```

ROUND 7

PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

```

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

```

```

@repeat
@begin<matrix>
@comment<Exper Screen 19. Game Alpha_2+ Alpha_4>
@set<alternatives = 2; attributes = 3>
@set<responsemode = keyboard>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="100";box[1,2]="0.7";box[1,3]="500";
box[2,1]="100";box[2,2]="1.5"; box[2,3]="500">
@set<responseline="Enter your guess (a number from 0 to 1000).">
@end<matrix>

```

```

@declare<real : %d1>
@assign<%d1=%lresponse>
@if<%d1#lt#0>
@assign<%d1=1001>
@end_if

```

```

@if<%d1#gt#1000>
@assign<%d1=1001>
@end_if
@if<%d1#eq#1001>
@begin<text>
@begin<screentext>
        The guess you entered is not valid.

        We ask you to enter a number from 0 to 1000.
@end<screentext>
@end<text>
@end_if
@until<(%d1)#lt#1001>

@begin<text>
@begin<screentext>
        ROUND      8

        PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

        (Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@repeat
@begin<matrix>
@comment<Exper Screen 21. Game Gamma_2+ Beta_4>
@set<alternatives = 2; attributes = 3>
@set<responsemode = keyboard>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="300";box[1,2]="0.7";box[1,3]="500";
box[2,1]="100";box[2,2]="1.5"; box[2,3]="900">
@set<responseline="Enter your guess (a number from 0 to 1000).">
@end<matrix>

@declare<real : %d1>
@assign<%d1=%lresponse>
@if<%d1#lt#0>
@assign<%d1=1001>
@end_if
@if<%d1#gt#1000>
@assign<%d1=1001>
@end_if
@if<%d1#eq#1001>
@begin<text>
@begin<screentext>
        The guess you entered is not valid.

        We ask you to enter a number from 0 to 1000.
@end<screentext>
@end<text>
@end_if
@until<(%d1)#lt#1001>

@begin<text>

```

```
@begin<screen text>
```

ROUND 9

PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

```
@end<screen text>
```

```
@end<text>
```

```
@repeat
```

```
@begin<matrix>
```

```
@comment<Exper Screen 23. Game Gamma_4+ Delta_3>
```

```
@set<alternatives = 2; attributes = 3>
```

```
@set<response mode = keyboard>
```

```
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
```

```
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER  
LIMIT">
```

```
@set<box[1,1]="300";box[1,2]="1.5";box[1,3]="500";
```

```
box[2,1]="300";box[2,2]="1.3"; box[2,3]="900">
```

```
@set<responseline="Enter your guess (a number from 0 to 1000).">
```

```
@end<matrix>
```

```
@declare<real : %d1>
```

```
@assign<%d1=%lresponse>
```

```
@if<%d1#lt#0>
```

```
@assign<%d1=1001>
```

```
@end_if
```

```
@if<%d1#gt#1000>
```

```
@assign<%d1=1001>
```

```
@end_if
```

```
@if<%d1#eq#1001>
```

```
@begin<text>
```

```
@begin<screen text>
```

The guess you entered is not valid.

We ask you to enter a number from 0 to 1000.

```
@end<screen text>
```

```
@end<text>
```

```
@end_if
```

```
@until<(%d1)#lt#1001>
```

```
@begin<text>
```

```
@begin<screen text>
```

ROUND 10

PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

```
@end<screen text>
```

```
@end<text>
```

```
@repeat
```

```
@begin<matrix>
```

```
@comment<Exper Screen 25. Game Gamma_2+ Beta_1>
```

```
@set<alternatives = 2; attributes = 3>
```

```
@set<response mode = keyboard>
```

```
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
```



```

@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="300";box[1,2]="0.7";box[1,3]="500";
box[2,1]="100";box[2,2]="0.5"; box[2,3]="900">
@set<responseline="Enter your guess (a number from 0 to 1000).">
@end<matrix>

```

```

@declare<real : %d1>
@assign<%d1=%lresponse>
@if<%d1#lt#0>
@assign<%d1=1001>
@end_if
@if<%d1#gt#1000>
@assign<%d1=1001>
@end_if
@if<%d1#eq#1001>
@begin<text>
@begin<screentext>

```

The guess you entered is not valid.

We ask you to enter a number from 0 to 1000.

```

@end<screentext>
@end<text>
@end_if
@until<(%d1)#lt#1001>

```

```

@begin<text>
@begin<screentext>

```

ROUND 11

PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

```

(Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

```

```

@repeat
@begin<matrix>
@comment<Exper Screen 27. Game Alpha_4+ Beta_1>
@set<alternatives = 2; attributes = 3>
@set<responsemode = keyboard>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="100";box[1,2]="1.5";box[1,3]="500";
box[2,1]="100";box[2,2]="0.5"; box[2,3]="900">
@set<responseline="Enter your guess (a number from 0 to 1000).">
@end<matrix>

```

```

@declare<real : %d1>
@assign<%d1=%lresponse>
@if<%d1#lt#0>
@assign<%d1=1001>
@end_if
@if<%d1#gt#1000>
@assign<%d1=1001>
@end_if

```

```

@if<%d1#eq#1001>
@begin<text>
@begin<screentext>
    The guess you entered is not valid.

    We ask you to enter a number from 0 to 1000.
@end<screentext>
@end<text>
@end_if
@until<(%d1)#lt#1001>

@begin<text>
@begin<screentext>
    ROUND 12

    PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

    (Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@repeat
@begin<matrix>
@comment<Exper Screen 29. Game Delta_3+ Delta_3>
@set<alternatives = 2; attributes = 3>
@set<responsemode = keyboard>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="300";box[1,2]="1.3";box[1,3]="900";
box[2,1]="300";box[2,2]="1.3"; box[2,3]="900">
@set<responseline="Enter your guess (a number from 0 to 1000).">
@end<matrix>

@declare<real : %d1>
@assign<%d1=%lresponse>
@if<%d1#lt#0>
@assign<%d1=1001>
@end_if
@if<%d1#gt#1000>
@assign<%d1=1001>
@end_if
@if<%d1#eq#1001>
@begin<text>
@begin<screentext>
    The guess you entered is not valid.

    We ask you to enter a number from 0 to 1000.
@end<screentext>
@end<text>
@end_if
@until<(%d1)#lt#1001>

@begin<text>
@begin<screentext>
    ROUND 13

```

PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

@end<screentext>

@end<text>

@repeat

@begin<matrix>

@comment<Exper Screen 31. Game Beta_3+ Delta_2>

@set<alternatives = 2; attributes = 3>

@set<responsemode = keyboard>

@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >

@SET<ATTR[1]="LOWER LIMIT " ;ATTR[2]="TARGET " ;ATTR[3]="UPPER LIMIT">

@set<box[1,1]="100";box[1,2]="1.3";box[1,3]="900";

box[2,1]="300";box[2,2]="0.7"; box[2,3]="900">

@set<responseline="Enter your guess (a number from 0 to 1000).">

@end<matrix>

@declare<real : %dl>

@assign<%dl=%lresponse>

@if<%dl#lt#0>

@assign<%dl=1001>

@end_if

@if<%dl#gt#1000>

@assign<%dl=1001>

@end_if

@if<%dl#eq#1001>

@begin<text>

@begin<screentext>

The guess you entered is not valid.

We ask you to enter a number from 0 to 1000.

@end<screentext>

@end<text>

@end_if

@until<(%dl)#lt#1001>

@begin<text>

@begin<screentext>

ROUND 14

PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

@end<screentext>

@end<text>

@repeat

@begin<matrix>

@comment<Exper Screen 33. Game Beta 1+ Gamma 2>

@set<alternatives = 2; attributes = 3>

@set<responsemode = keyboard>

@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >

@SET<ATTR[1]="LOWER LIMIT " ;ATTR[2]="TARGET " ;ATTR[3]="UPPER LIMIT">

@set<box[1,1]="100";box[1,2]="0.5";box[1,3]="900";

```

box[2,1]="300";box[2,2]="0.7"; box[2,3]="500">
@set<responseline="Enter your guess (a number from 0 to 1000).">
@end<matrix>

@declare<real : %d1>
@assign<%d1=%lresponse>
@if<%d1#lt#0>
@assign<%d1=1001>
@end_if
@if<%d1#gt#1000>
@assign<%d1=1001>
@end_if
@if<%d1#eq#1001>
@begin<text>
@begin<screentext>
                The guess you entered is not valid.

                We ask you to enter a number from 0 to 1000.
@end<screentext>
@end<text>
@end_if
@until<(%d1)#lt#1001>

@begin<text>
@begin<screentext>
                ROUND 15

                PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

                (Click on the bar at the bottom of this screen to move on to the next screen)
@end<screentext>
@end<text>

@repeat
@begin<matrix>
@comment<Exper Screen 35. Game Beta_1+Alpha_2>
@set<alternatives = 2; attributes = 3>
@set<responsemode = keyboard>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="100";box[1,2]="0.5";box[1,3]="900";
box[2,1]="100";box[2,2]="0.7"; box[2,3]="500">
@set<responseline="Enter your guess (a number from 0 to 1000).">
@end<matrix>

@declare<real : %d1>
@assign<%d1=%lresponse>
@if<%d1#lt#0>
@assign<%d1=1001>
@end_if
@if<%d1#gt#1000>
@assign<%d1=1001>
@end_if
@if<%d1#eq#1001>
@begin<text>
@begin<screentext>

```

The guess you entered is not valid.

We ask you to enter a number from 0 to 1000.

```
@end<screentext>
@end<text>
@end_if
@until<(%d1)#lt#1001>
```

```
@begin<text>
@begin<screentext>
```

ROUND 16

PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

```
@end<screentext>
@end<text>
```

```
@repeat
@begin<matrix>
@comment<Exper Screen 37. Game Beta_1+Alpha_4>
@set<alternatives = 2; attributes = 3>
@set<responsemode = keyboard>
@SET<ALT[1]=" Your Limits&Target"; ALT[2]= "HerHis Limits&Target" >
@SET<ATTR[1]="LOWER LIMIT          ";ATTR[2]="TARGET          ";ATTR[3]="UPPER
LIMIT">
@set<box[1,1]="100";box[1,2]="0.5";box[1,3]="900";
box[2,1]="100";box[2,2]="1.5"; box[2,3]="500">
@set<responseline="Enter your guess (a number from 0 to 1000).">
@end<matrix>
```

```
@declare<real : %d1>
@assign<%d1=%lresponse>
@if<%d1#lt#0>
@assign<%d1=1001>
@end_if
@if<%d1#gt#1000>
@assign<%d1=1001>
@end_if
@if<%d1#eq#1001>
@begin<text>
@begin<screentext>
```

The guess you entered is not valid.

We ask you to enter a number from 0 to 1000.

```
@end<screentext>
@end<text>
@end_if
@until<(%d1)#lt#1001>
```

```
@end<file>
```