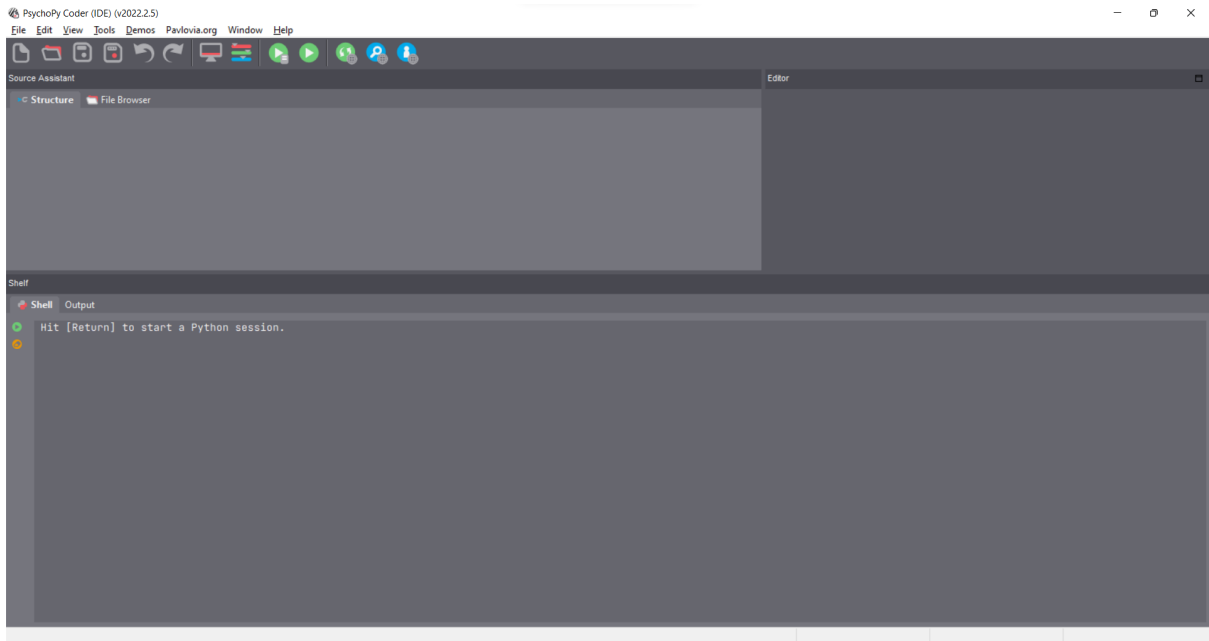# Recreation of the experiment
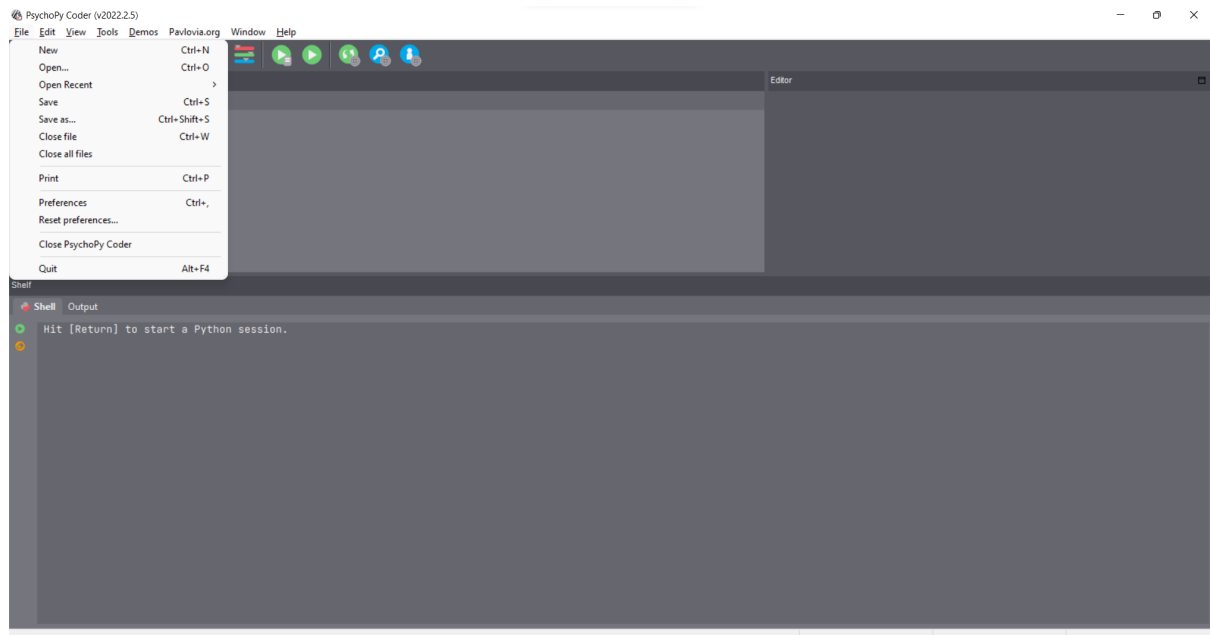
Group: Lab Rats

I.   Instructions to run the game
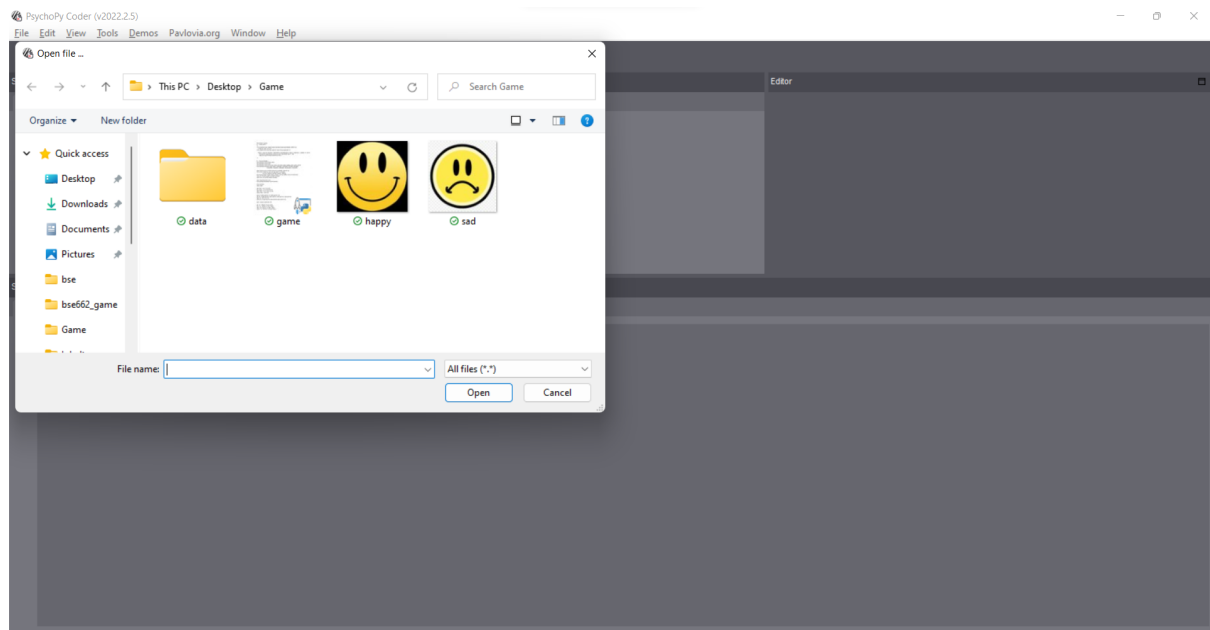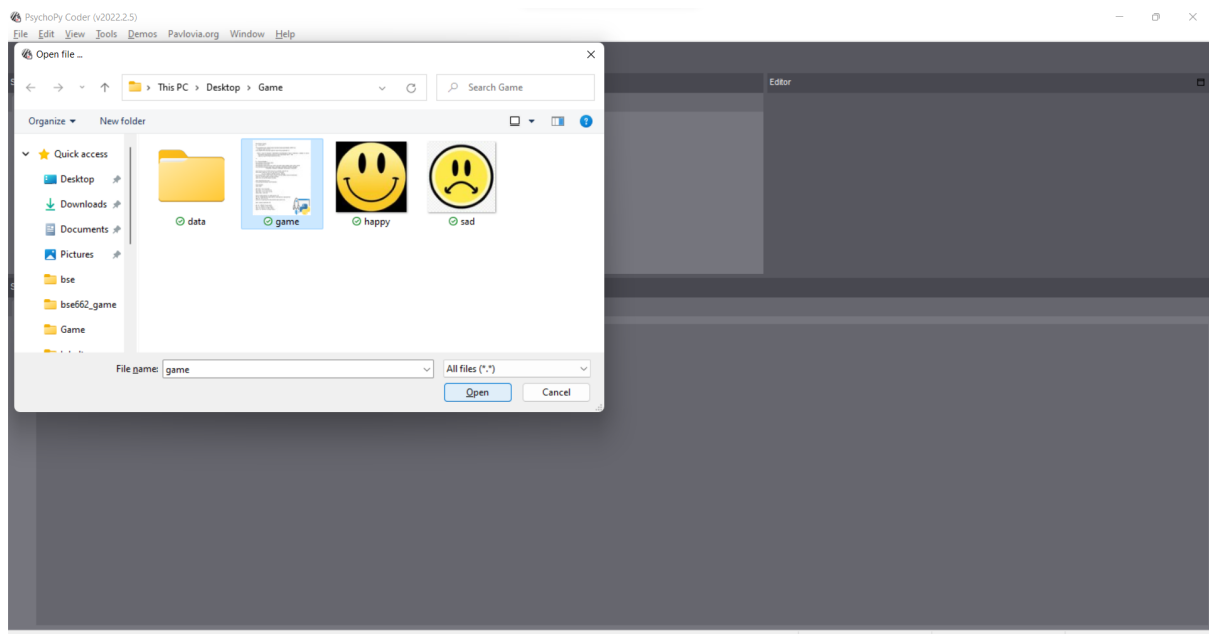
1. Open Psychopy in the "Coder" view

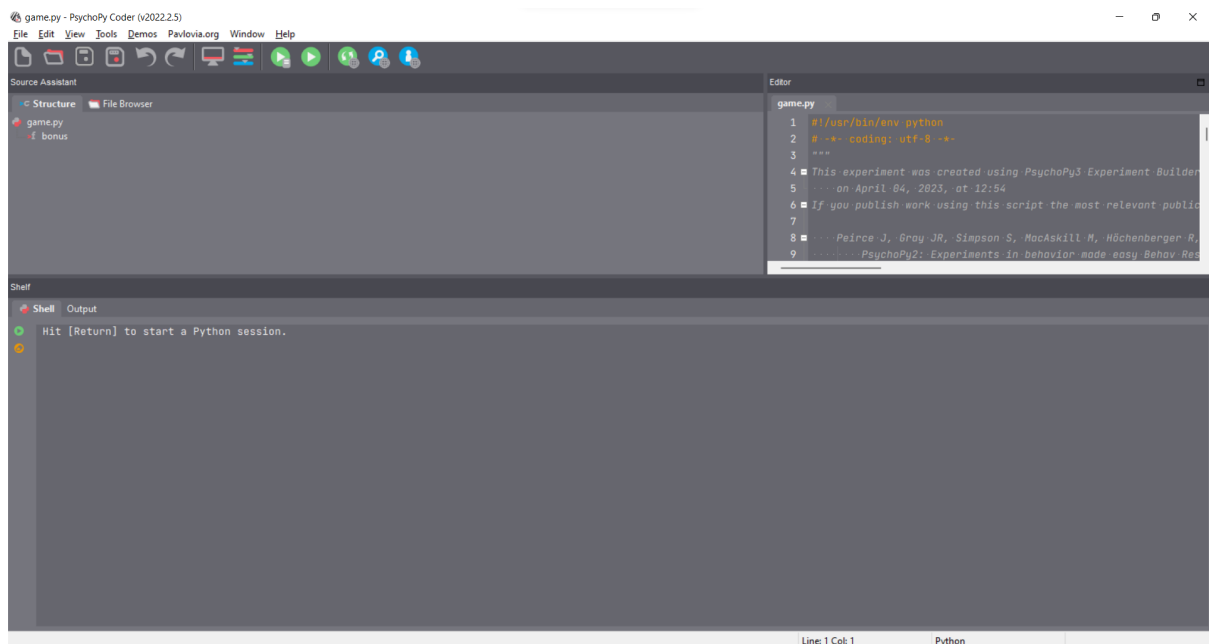2. Click on the File tab and select the Open… option.

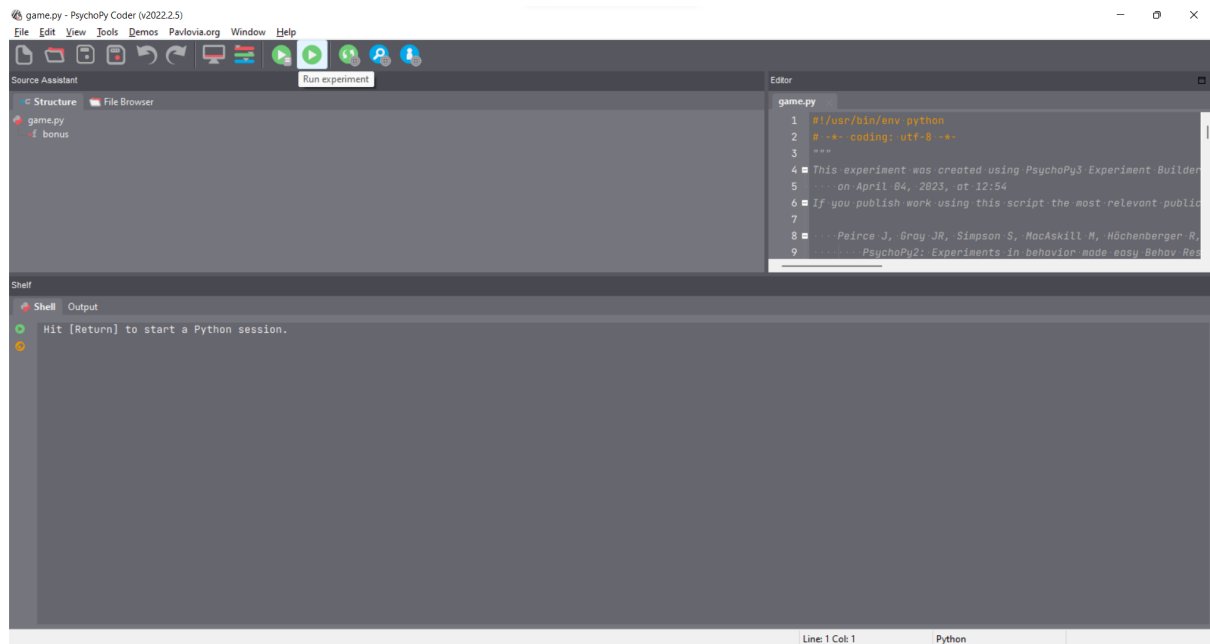3. Browse to the folder which contains the game and the images.

4. Select game.py and click on open.

5. The Python file should then be loaded to Psychopy like below.

6. Click on the 'Run experiment' button to start the game.

II.   Notes about the game

The experiment has been recreated following all the specifications mentioned in the paper. Some minor changes or other details are listed below:

- The mean and the variances are equal to the ones used in the experiment. 20 values fitting the normal distribution are generated using the mean and variance values in each outcome condition.
- The number of rounds has been shortened from 40 to 16 to reduce the duration for the sake of the current experiment. 8 unlimited and limited time rounds each are played by a participant in addition to the 2 practice rounds in the beginning.
- The unlimited and limited time rounds are alternating in the experiment. This simplifies the flow of the game and can be assumed without the loss of generality of the experiment.
- A random mapping is generated each round for the keys Q, W, O, and P. The order of the outcome conditions has been randomized too.
- The comprehension questions at the beginning of the experiment have been designed based on the instructions.
- The formula for the bonus at the end of each round and the end of the experiment has been calculated out of ₹100 instead of the $4 as in the original experiment. This is to get an insight that can double as a percentage estimation for the performance of the participant.
- A separate CSV file contains the reward values used. Depending on the mapping and the choice of the participant, the bonus is calculated as given by the formula after each round. The final bonus is randomly selected among the round bonuses, as stated by the paper.
- In the limited time case, in case the participant doesn't respond within 400 ms, the highest reward is displayed along with an X next to it (instead of a strikethrough as

the experiment implements, as Psychopy doesn't allow a string with multiple characters in place of each char).
- There are two CSV files, one generated automatically and the other ending with an underscore. The latter holds the values associated with each outcome condition for 20 trials generated using a random sampling of the outcome distribution. The former has all the key responses, reaction times, and other associated data.

All unstated details in the above notes are replicated exactly as in the experiment.