Cognition Lab

Lab 4

Part 1

1) Please Create a "Lab 4" folder in the "Cognition Lab" folder on your desktop.
2) From Resources/Labs/Lab 4 on Sakai, download the following files into your "Lab 4" folder :

   G.png

   R.png

   revG.png

   revR.png
3) Now read the slides **Lab4.pptx** (2-30) for some background info on PsychoPy builder and the Mental Rotation experiment. The graph on slide 30 shows you our final goal: build a graph of reaction times as a function of rotation.
4) Create your own trialTypes.xlsx file (see slides 31-35 and related video - you need to watch this video in creating the file: https://tinyurl.com/y26bq5c7). Save the file in the same "Lab 4" folder as the others.
5) Build the experiment in PsychoPy (see slides 36-58 - and related video: https://tinyurl.com/y6mdqokm). Make sure you save the experiment file is in the same folder. Then run the experiment on yourself.
6) Analyze the data (instruction on **Lab4.pptx** – slides 60-73 – and related video: https://tinyurl.com/y3onpnpa). Calculate the correlation coefficient .
7) Build a "x-y scatter-plot" and visualize a "trend line" on it (instructions on video: https://tinyurl.com/yxl4x6lh)
8) Please upload the excel files on which you conducted the data analysis as "FirstnameLastname_CogLab_Lab4_graph."

Part 2

1) Following the instructions on slides 75-91 on **Lab4.pptx**, write an introduction to a report about the Mental Rotation Study.
2) The introduction should have a "reverse hourglass" structure (see slide 91), going from the general to the particular.
3) In the introduction draw an overview of the debate on mental imagery citing relevant papers, (**they may be the papers that are mentioned in the slides**.) "Pretend" that you are a researcher looking at the literature with the desire to settle the debate and understand whether mental imagery exist as "objects" in the mind (objects we can "manipulate" with our imagination) or just as "concepts". What will be your predictions in either case? If an image is a naked concept, does it matter how many degrees it's rotated? The introduction should be about 1 and half / 2 pages double spaced.

The introduction should cite at least two papers.
Please upload the Introduction as "FirstnameLastname_CogLab_Lab4_Introduction".