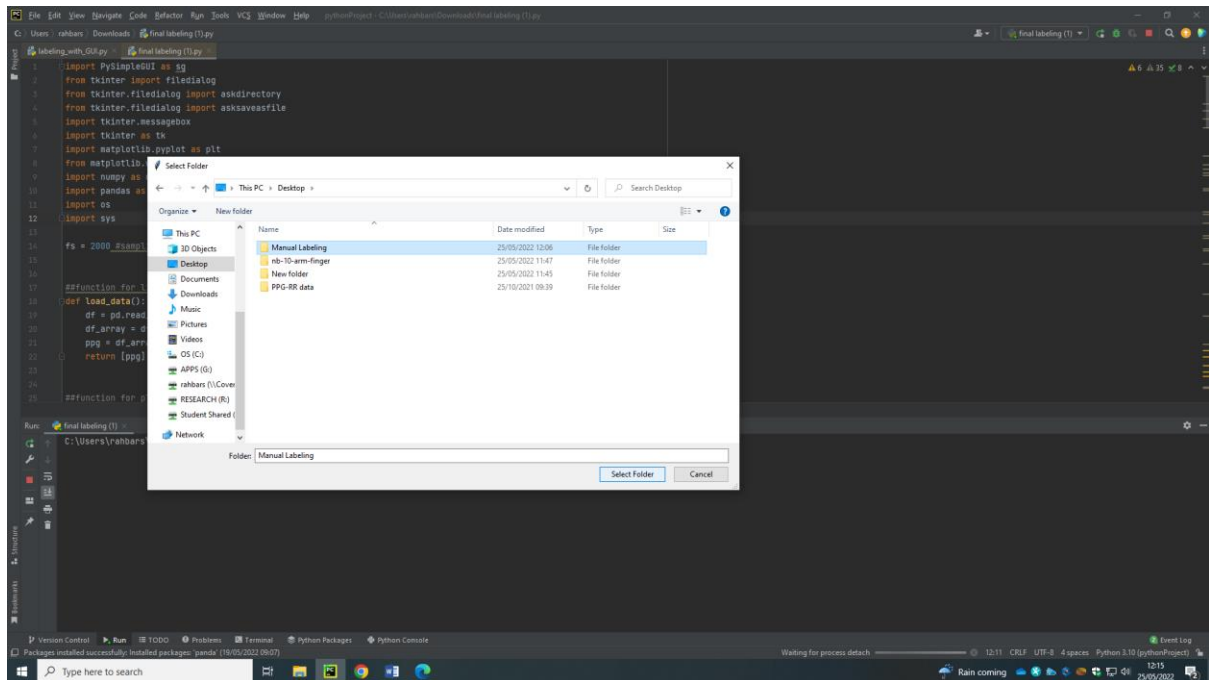
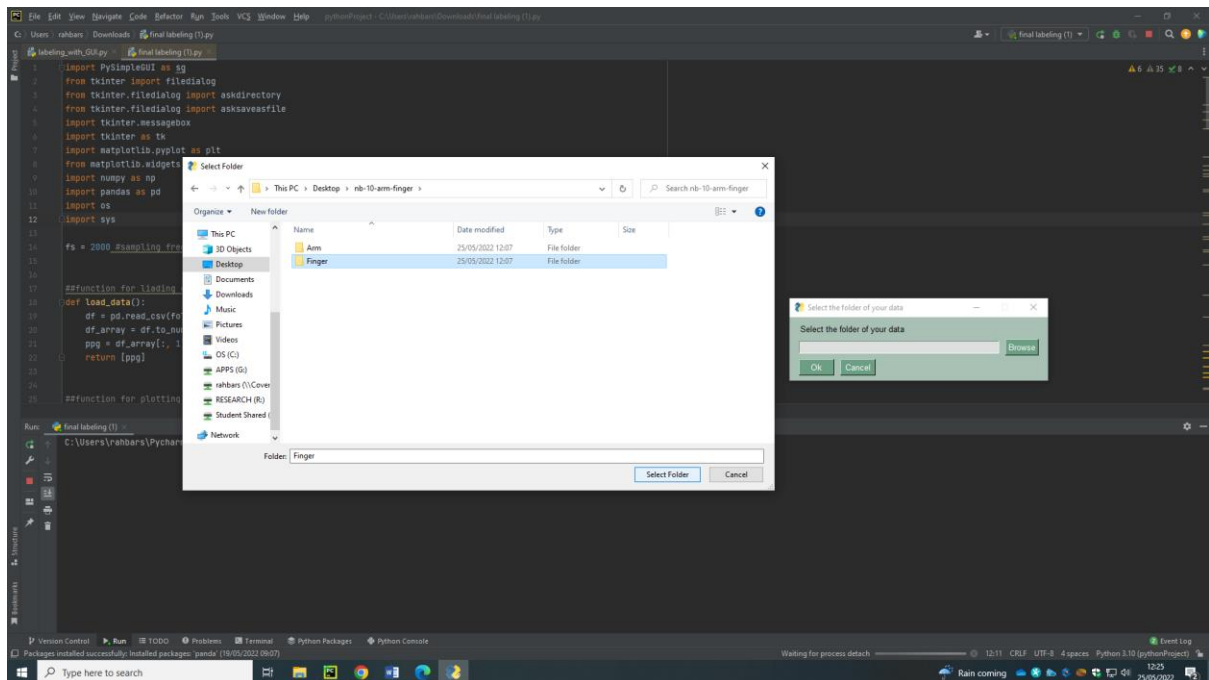


Signal Labelling GUI User Manual

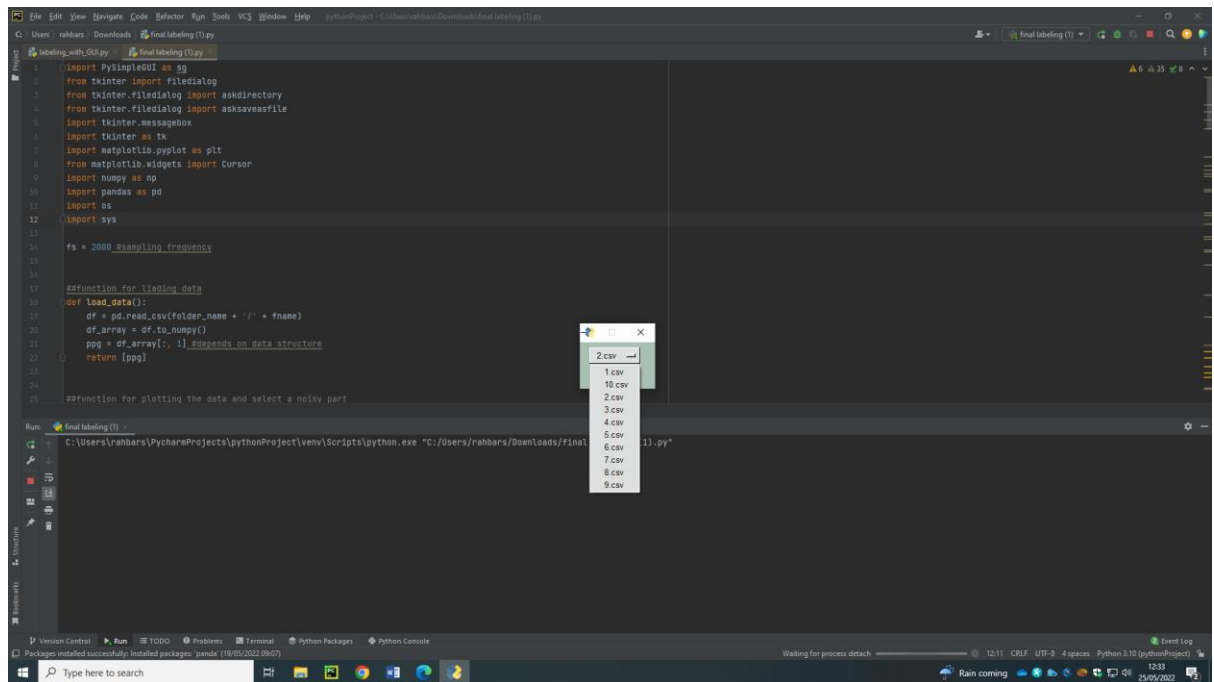
- 1) After running the programme, it will ask you to select the folder you wish to save a final output.



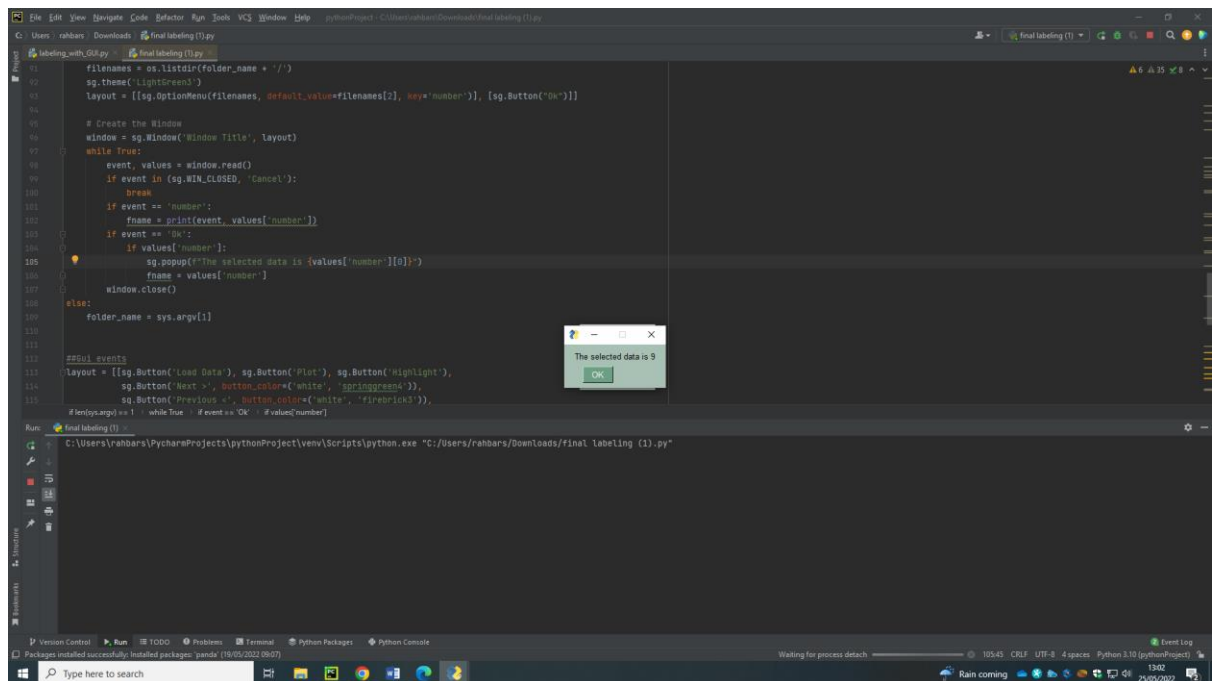
- 2) Then it is time to select the folder of your data, please keep in mind that you only need to select the folder of data and do not select the data file itself.



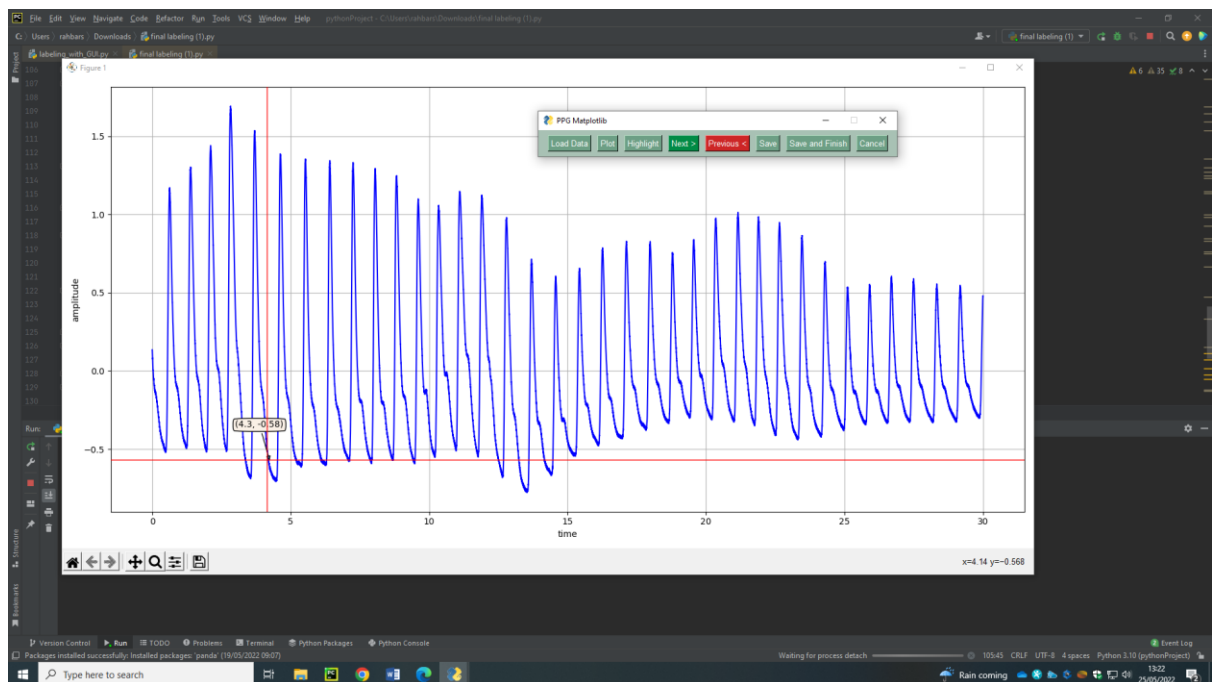
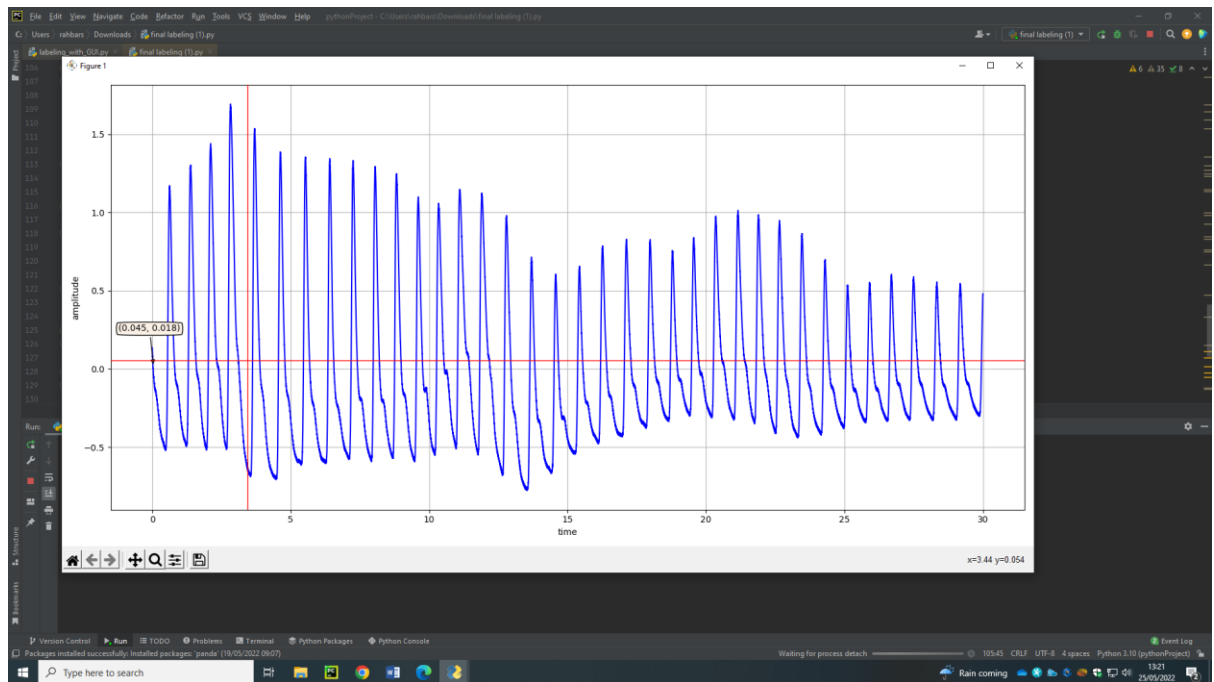
- 3) The all data available in that folder will load by programme and you can select the one you are want. In my case, for example, there were 10 data.



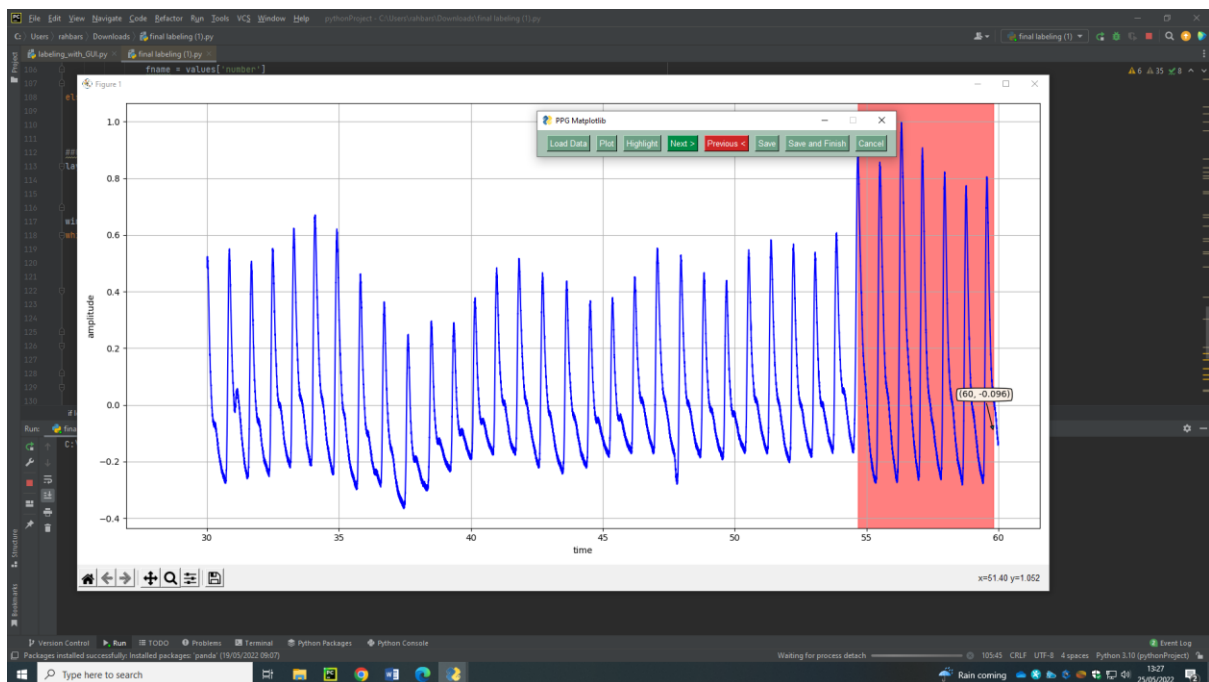
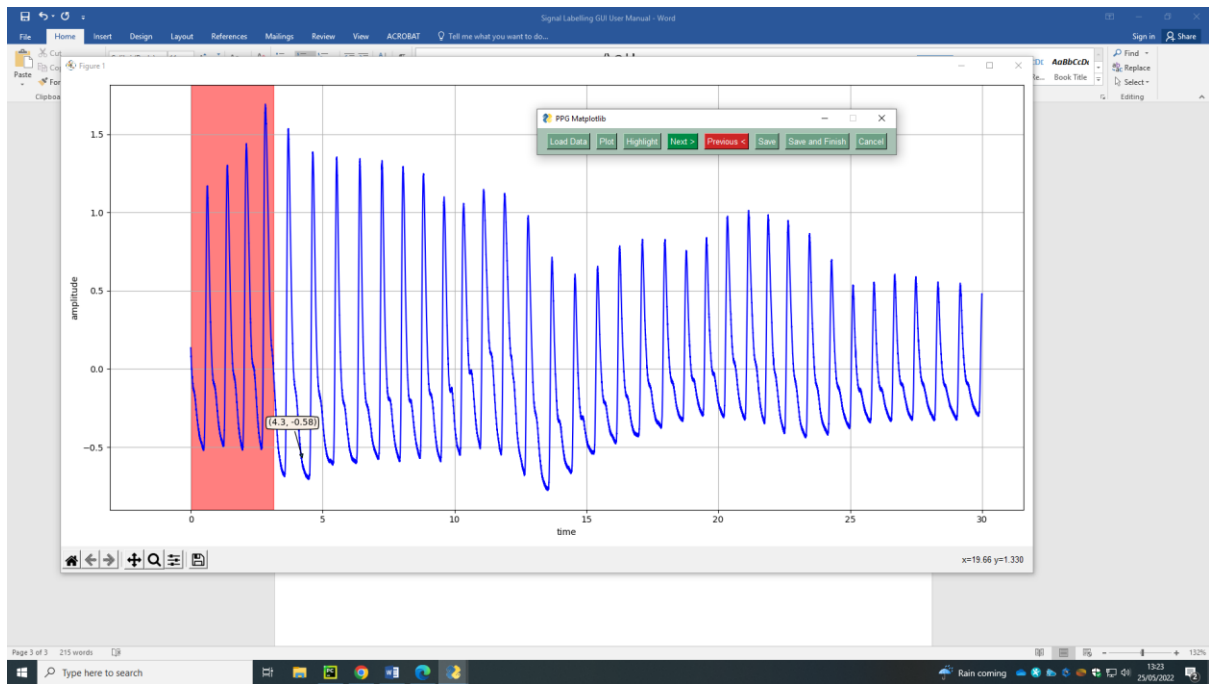
4) I chose number 9 and it popups “the selected data is 9”.



5) Then first press load data and then plot to see the signal. There is an ability to select the points that the noisy part is started and ended. In the example window which is provided here, the signal does not have any motion artefact noise, but I was selected the first and last parts to show you the final result. It should be noted that the window can change based on your signal and goal. In this case, I chose 30 seconds. You can change it by line 125, frame_len.



- 6) Then, you should press highlight and save. Then by pressing next, the following window length of your data will be displayed. In my example, the first on is plotted from 0 to 30 second and the next window is form 30 to 60 second. Also, the last part is highlighted since it is easy to track.



- 7) Then press save and finish to close the programme and you can find the output array with the same name of the chosen data in the folder that was selected at the beginning. The selected parts indexes are label as -1 to represent the noisy (unreliable) parts and rest of them are 1 (reliable).

Sample data is available with this code. Each provided data have three columns that represent ECG, respiratory rate and PPG which lies the second column. Each measurement was last for 1 minutes while the frequency sampling of data recording was 2000 and it has 120001 indexes. The following screen shot is part of the output array.

