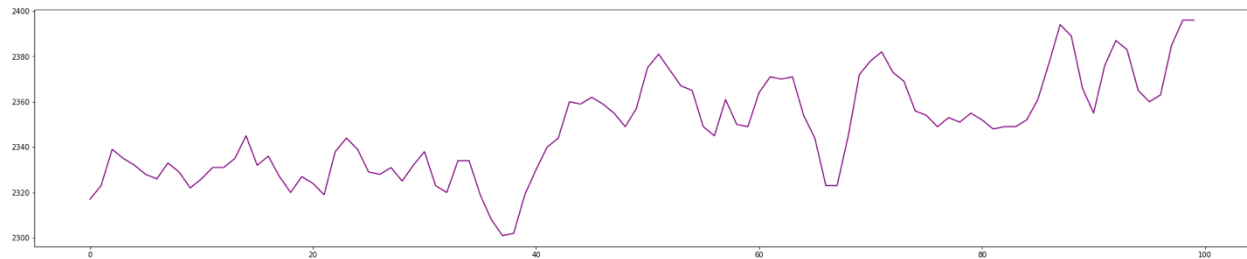


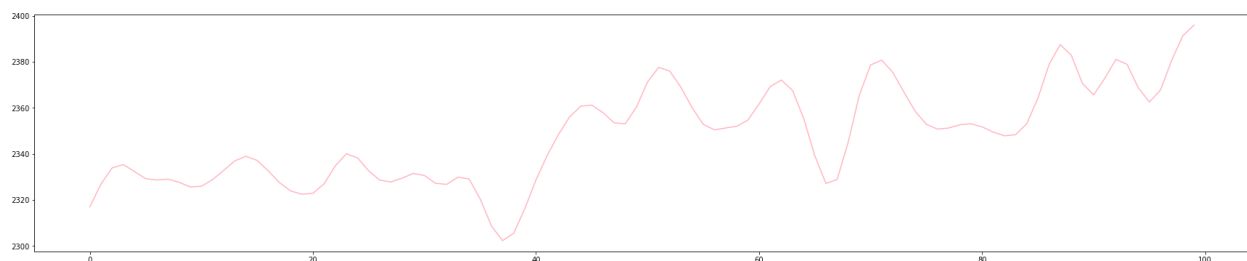
Name : Iqbal Saviola Syah Billhaq

NIM : 1301190318

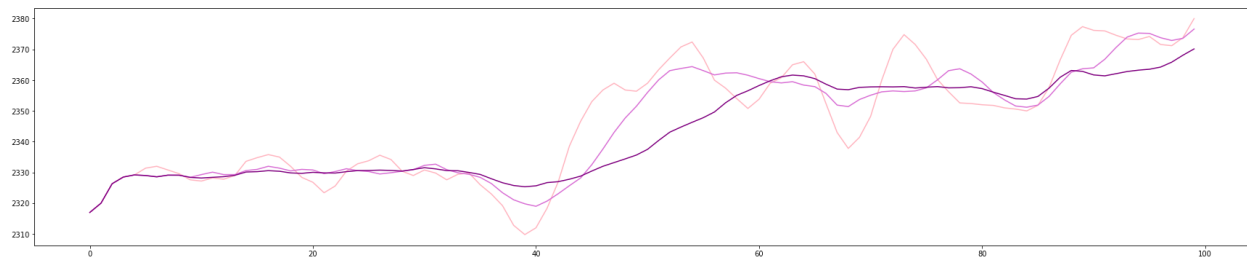
1. Plot the raw data and compared to LPF and MVA Filter.



(raw data)



(LPF filter with fc 100)

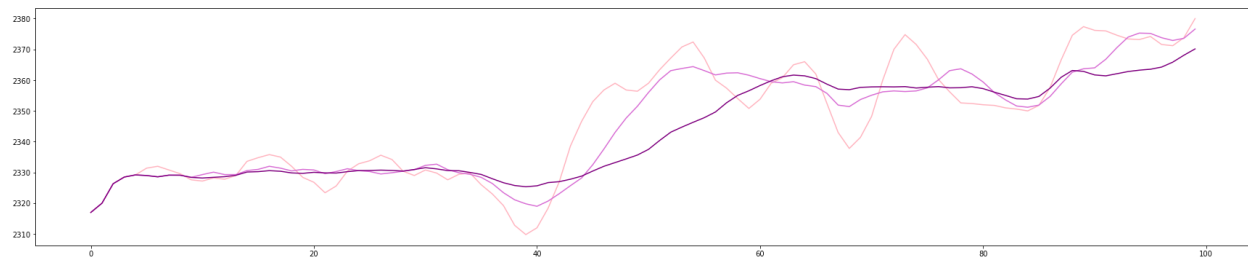


(MVA filter with 5, 10, and 20 window size)

2. Which frequency cut-off (**fc**) do you use for LPF? How do you determine that **fc** ? (please provide a plot of filtered data regarding the frequency **cut-off** you used)

Frequency cut-off (fc) that we use is 100 hz, its based on how much noise we want to filter on. The higher the value of (fc), the more noise is filtered, the lower the value of (fc), the less noise is filtered.

3. What is the **windows size** you used in MVA ?
(please select 3 different windows size, and then plot and compared the results).



The window size we use is 3 value, 5 (lightpink), 10 (orchid) and 20 (purple). Basically, the lower value of the window size, the less noise filtered. In other hand, the higher value of the window size, the more noise filtered and the smoother the data plot.

Which windows size does give smooth data plot? Why? 4. Please attach your listing program for LPF and MVA.