a) All plots/graphs should have suitable title, labels, axis scaling and (legends if any).
b) Use “Publish” command of MATLAB to generate the pdf file inclusive of code and output figures. **Section 1 of the MATLAB code should contain Author’s name and ID number.**
c) Refer to following link for using publish command - https://in.mathworks.com/videos/publishing-matlab-code-from-the-editor-101570.html
d) If you have report generator tool available, then you can make use of the same for report generation in MATLAB.
e) You can make use of live-script as well for the report generation.

Lab Assignment -3

This assignment consists of 2 experiments to be performed as follows. Prepare a single MATLAB file (.m script) with sections named as “Experiment-1” and “Experiment-2Name the file of lab session 3 as L3_201#A#PS####G.pdf

Experiment -1

Show the single sided amplitude, phase and power spectrum for the following signal -

X = cos(2*pi*20*t + pi/4) + 3*cos(2*pi*40*t -2* pi/6) +2* cos(2*pi*60*t + pi/8)

Figure should have 4 subplots. Use in the form of 2 rows and 2 columns

Subplot 1 – Signal

Subplot 2 – Amplitude spectrum

Subplot 3 – Phase spectrum in radians

Subplot 4 – Power spectrum

Experiment -2

Plot the square wave of 50% duty cycle and 10 Hz frequency. Show the single sided power spectral density for the same.

Plot figure with 2 subplots. Rows -2 column -1

Subplot 1 – Signal

Subplot2 – Power spectral density