

```

1  x_values = [0:0.01:2*pi]
2  y = sin(x_values)
3  plot(x_values,y)
4  hold on; % to hold the graph so that other graph can also be plotted on the same
   figure
5  % otherwise it will be plotted on separate figure
6  y2 = cos(x_values)
7  plot(x_values,y2, 'r') % show that in red 'r' color
8
9  % try changing x_values to [0:0.1:2*pi] and then again plot
10 % infer what you see
11 % you will know the difference by visualisation
12
13 % below are things to add details to the plot
14 % however, MATLAB has provided a graphical interface to do all the editing works
15 % so better tweak the plot from the tools provided in that plot window itself
16 % search for some icon with various shades of colour that will take you to
   editing window
17 % there you can do a lot-lot more than that done below
18 xlabel('theta')
19 ylabel('value')
20 legend('sin' , 'cos')
21 title('trigonometric functions')
22
23 % never ever take screenshot of the plot
24 % there is an option to export the image as png
25 % do that if you want to save the plot
26 % print -dpng 'trigonometric functions.png' is command-line statement for the
   same work
27 % however there is an option too if you don't want to use command-line
28
29
30 axis([0.5 1 -1 1]) % sets x-axis to range 0.5 to 1 and y-axis range to -1 and 1
31
32 subplot(2,2,1) % divides the figure into 1 row 2 columns plot-grid and access
   the first plot
33 plot(x_values,y)
34 subplot(2,2,2) % access second plot
35 plot(x_values,y2)
36 subplot(2,2,4) %access fourth plot
37 y3 = tan(x_values)
38 plot(x_values,y3)

```