Laboratory 2

1. plot a circle of radius 1.
   #you may see ?plot to get a feeling.

2. Plot Sin(x)/x and find the value when x is 0.

3. Plot a family of straight lines with different slopes and different intercepts.

4. Plot a family of parabola.

5. Plot sin(x)*cos(x), sin(x)/cos(x), sin(x)/tan(x) and all other combinations of trigonometric functions. Can you predict the behavior of these functions.

6. Plot tan(x); Also plot sin(p*x), cos(p*x) for different values of p. How does the period change with respect to p.

7. Plot sin(x)/x, cos(x)/x, tan(x)/x and other possible combinations of these.

8. Draw an ellipse with the center (3,3), the major axis is of 6 units and the minor axis is 2 units long.

9. Explore the parametric representation of a circle, an ellipse, parabola, hyperbola, cardiod and other shapes.

10. Plot the spiral using polar co-ordinates.