

## Graph Questions

1. Declare a vector having 4 numbers (8, 4, 5, 3) which indicate the movie preferences of your 20 friends. Comedy, Action, Romance, Science or Fiction - the type of movie they want to watch today. Prepare a Pie chart to show the results.
  - a. Show the pie slices in 4 attractive colors
  - b. Give count against the slices
  - c. Movie type in legend
  - d. Order the pie slices in clockwise direction.
  - e. Give Heading.
2. Draw a bar chart for the above data. Provide Main Heading, labels for X Axis and Y Axis
3. ABC corporation manufactures and sales 3 products A, B & C. Draw a stacked bar chart to show the annual product sales of the company. The sales for the 4 quarters are to be displayed in the X axis. Use proper legends to show the sales of the 3 products.
4. Draw a histogram showing the Miles/gallon value distributions among the various car models in the mtcars data (Motor Trend Car Road Tests) results.
5. Create a graph using the basic steps plot.new()
  - a. Draw x axis and y axis
  - b. Mark 5 random points (declare them as X and Y vectors)
  - c. Draw line joining them
  - d. Draw a horizontal line touching the topmost point
  - e. Draw a vertical line touching the rightmost point

6. Let the following be the response of the usage of 2 drugs A & B against dosage. Draw Line chart showing the responses, with both data in the same graph

```
drugA <- c(16, 20, 27, 40, 60)
```

```
drugB <- c(15, 18, 25, 31, 40)
```

hint(use plot function to plot the response of drugA and lines function to plot drug B in the same graph)

7. Use the built in data frame `airquality` for the following question.  
Draw boxplot to show the distribution of temperature values against month.
8. Use the built in data frame `iris` for the following question  
Draw scatter diagram showing the distribution of `Sepal.Length` & `Sepal.Width` values (hint:use `plot()` function to draw scatterplot)
9. Use the built in data frame `iris` for the following question.  
Draw a `Scatterplotmatrix` for comparing the values of `Sepal.Length`, `Sepal.Width`, `Petal.Length` & `Petal.Width`  
(hint: use `pairs()` function )