

National Institute of Electronics and Information Technology, Calicut

Certified AI Professional

Assignment 3 (Total Marks 20)

Reading data

1. Identify download a dataset from internet (any format). Write a program to load it into an R variable and print the first six lines of the data. Submit the link from which data is taken. (Do not include the dataset in submission. First 6 lines printed should be included in submission)

Data Visualization

2. Declare a vector variable having 4 numbers (7,3,4,6) to indicate the count of movies released this year in Comedy, Action, Romance, Science Fiction categories. Prepare a Pie chart to visualize the data.
 - a. Show the pie slices in 4 attractive colors
 - b. Give Heading for the graph
 - c. Give the movie types as label against the slices
3. Draw a bar chart for the above data. Provide Main Heading, labels for X Axis and Y Axis
4. 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.
5. Draw a histogram showing the Miles/gallon value distributions among the various car models in the mtcars data (Motor Trend Car Road Tests) results.
6. Create a graph using the basic steps
 - a. plot.new()
 - b. Draw x axis and y axis
 - c. Mark 5 random points (declare them as X and Y vectors)
 - d. Draw a horizontal line touching the topmost point (hint :Use Max() function)
7. 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

Marks : questions 1 to 6 carry 3 marks each and 7 carry 2 marks.