1.(i) Write a function in R programming to print generate Fibonacci sequence using recursion in R.

(ii) Find sum of natural numbers up-to 10, without formula using loop statement.

(iii) create a vector 1:10 and Find a square of each number and store that in a separate list.

2. (motor trend car road test) comprises fuel consumption, performance and 10 aspects of automobile  
design for 32 automobiles. It comes pre-installed  with  package in R

(i) Find the dimension of the data set

(ii)Give the statistical summary of the features.

(iii)Print the categorical features in Dataset

(iv)Find the average weight(wt) grouped by Engine shape(vs)

(v)Find the largest and smallest value of the variable weight with respect to Engine shape

3.Use ggplot package to plot below EDA questions label the plot accordingly  
(i)Create weight(wt) vs displacement(disp) scatter plot factor by  Engine Shape(vs)

(ii) Create horsepower (hp) vs mileage (mgp) scatter plot factor by  Engine Shape(vs)

(iv)In above(ii) plot , Separate columns according to cylinders(cyl) size

(v) Create histogram plot for horsepower (hp) with bin-width size of 5

4. Performing Logistic regression on dataset to predict the cars Engine shape(vs) .  
(i)Do the EDA analysis and find the features which is impact the Engine shape and use this  
for model.

(ii) Split the dataset randomly with 80:20 ration to create train and test dataset and create  
logistic model

(iii)Create the Confusion matrix among prediction and test data.