

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

Recursion in R

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

statement.

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- (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

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- (ii) Give the statistical summary of the features.

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- (iii) Print the categorical features in Dataset

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

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- (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(displacement) scatter plot factor by Engine Shape(vs)

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- (ii) Create horsepower (hp) vs mileage (mpg) 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 impact the Engine shape and use this  
for model.

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

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