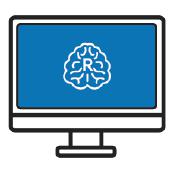
Data Analytics



SESSION 15: Model

Evaluation

Assignment 1

1

Data Analytics

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Data Analytics

**1. Introduction**

This assignment will help you understand the concepts learnt in the session.

**2. Objective**

This assignment will test your skills on the Decision Tree Based Model using R.

**3. Prerequisites**

Not applicable.

**4. Associated Data Files**

Not applicable.

**5. Problem Statement**

1. Use the below given data set

[DataSet](https://archive.ics.uci.edu/ml/datasets/Facebook+Comment+Volume+Dataset)

#1. Use the below given data set

#DataSet

#a. Predict the no of comments in next H hrs

#b. Use regression technique

#c. Report the training accuracy and test accuracy

#Answers

#a) & b)

#reading the dataset and viewing

slr <- read.csv("D:/acadgild/slr.csv")

slr1<- slr

View(slr1)

#features

dim(slr1)

str(slr1)

library(psych)

describe(slr1)

summary(slr1)

#visualization

hist(slr1$Advt ,xlab = "advt", ylab = "Frequency",main="Histogram of advt",col="red")

hist(slr1$Sales ,xlab = "sales", ylab = "Frequency",main="Histogram of sales",col="blue")

plot(slr1$Advt,slr1$Sales)

#\*\*\*NOTE\*\*\*

#using linear regression model technique

#using slr1 dataset

#linear regression model

model<- lm(slr1$Advt~slr1$Sales)

model

#Important features

#multiple r squared value

#p value of slope test

#F stats

#predicting

Pred<- predict(lm(slr1$Sales~slr1$Advt))

Pred

pred<- predict(model,newdata= slr1Test,type = "response")

table(slr1$Advt,pred>= 0.5)

conf<- table(slr1$Advt,pred)

conf

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Data Analytics

**6. Expected Output**

N/A

**7. Approximate Time to Complete Task**

30 mins.

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