# ASSIGNMENT 11.1

## 5.PROBLEM STATEMENT

### 1. Use the below given activities:

### a.Apply PCA to the dataset and show proportion of variance

Ans:- pca <- data(TP Rate, scale = TRUE)

TP Rate <- pca$data^2

TP Rate[1] / sum(TP Rate)

[1] 0.6200604

### b. Perform PCA using SVD approach

Ans:- # library(devtools)

install\_github('dagdata','genomicsclass')

library(dagdata)

data(tissuesGeneExpression)

library(rafalib)

### c. Show the graphs of PCA components

Ans:- plot (PCA, graph = FALSE)