**1. How many vowels are there in the names of USA States?**

***Ans:***

States <- rownames(USArrests)

x = c('a','e','i','o','u')

y = rep(0,times=5)

input <- data.frame(x,y)

input

for(i in 1:50){

test = States[i]

n = nchar(test)

test = strsplit(test,"")

temp = test[[1]]

k = 1

while(k <= n){

if( temp[k] == 'a' || temp[k] == 'A' )

{input[1,2]=input[1,2]+1}

if( temp[k] == 'e' || temp[k] == 'E' )

{input[2,2]=input[2,2]+1}

if( temp[k] == 'i' || temp[k] == 'I' )

{input[3,2]=input[3,2]+1}

if( temp[k] == 'o' || temp[k] == 'O' )

{input[4,2]=input[4,2]+1}

if( temp[k] == 'u' || temp[k] == 'U' )

{input[5,2]=input[5,2]+1}

k = k + 1

}

}

print(input)

**2. Visualize the vowels distribution.**

***Ans:***

barplot(input$y,names.arg = c('A','E','I','O','U'),

xlab = "Vowels",ylab="Frequency",col = "red")