ASSESMENT 2

1.

v1=c(1,2,3,4,5,6,7,8,9)

v2=c(letters[1:9])

m1=matrix(v1,nrow = 3,byrow = TRUE)

m2=matrix(v2,nrow = 3,byrow = TRUE)

print(m2)

print("Second row of second matrix :")

print(m2[2,])

print("Third row of first matrix :")

print(m1[3,])

print("Third column of first matrix :")

print(m1[,3])

2.

arr1=array(c(1,2,3))

arr2=array(c(4,5,6))

arr3=array(c(7,8,9))

arr=append(arr1,arr2,4)

arr=append(arr,arr3,7)

print(arr)

3.

v1=c(1,2,3)

v2=c(4,5,6)

v3=c(7,8,9)

v4=c(10,11,12)

result=array(c(v1,v2,v3,v3), dim = c(3,4))

print(result)

4.

v=c()

x=1

for(i in 51:(51+30)){

if(i%%2==0){

v=append(v,i,x)

x=x+1

}

}

arr=array(v,dim=c(5,3))

print(arr)

5.

exam\_data = data.frame(

name = c('Anastasia', 'Dima', 'Katherine', 'James', 'Emily', 'Michael', 'Matthew', 'Laura', 'Kevin', 'Jonas'),

score = c(12.5, 9, 16.5, 12, 9, 20, 14.5, 13.5, 8, 19),

attempts = c(1, 3, 2, 3, 2, 3, 1, 1, 2, 1),

qualify = c('yes', 'no', 'yes', 'no', 'no', 'yes', 'yes', 'no', 'no', 'yes')

)

print(exam\_data)

print(exam\_data[c(3,5),c(1,3)])

6.

exam\_data = data.frame(

name = c('Anastasia', 'Dima', 'Katherine', 'James', 'Emily', 'Michael', 'Matthew', 'Laura', 'Kevin', 'Jonas'),

score = c(12.5, 9, 16.5, 12, 9, 20, 14.5, 13.5, 8, 19),

attempts = c(1, 3, 2, 3, 2, 3, 1, 1, 2, 1),

qualify = c('yes', 'no', 'yes', 'no', 'no', 'yes', 'yes', 'no', 'no', 'yes')

)

Country=c("USA","USA","USA","USA","UK","USA","USA","India","USA","USA")

exam\_data$Country=Country

print(exam\_data)

7.

exam\_data = data.frame(

name = c('Anastasia', 'Dima', 'Katherine', 'James', 'Emily', 'Michael', 'Matthew', 'Laura', 'Kevin', 'Jonas'),

score = c(12.5, 9, 16.5, 12, 9, 20, 14.5, 13.5, 8, 19),

attempts = c(1, 3, 2, 3, 2, 3, 1, 1, 2, 1),

qualify = c('yes', 'no', 'yes', 'no', 'no', 'yes', 'yes', 'no', 'no', 'yes')

)

new\_exam\_data = data.frame(name = c('Robert', 'Sophia'),score = c(10.5, 9), attempts = c(1, 3),qualify = c('yes', 'no'))

print(rbind(exam\_data,new\_exam\_data))

8.

exam\_data = data.frame(

name = c('Anastasia', 'Dima', 'Katherine', 'James', 'Emily', 'Michael', 'Matthew', 'Laura', 'Kevin', 'Jonas'),

score = c(12.5, 9, 16.5, 12, 9, 20, 14.5, 13.5, 8, 19),

attempts = c(1, 3, 2, 3, 2, 3, 1, 1, 2, 1),

qualify = c('yes', 'no', 'yes', 'no', 'no', 'yes', 'yes', 'no', 'no', 'yes')

)

exam\_data = exam\_data[with(exam\_data, order(name, score)), ]

print(exam\_data)

9.

exam\_data = data.frame(

name = c('Anastasia', 'Dima', 'Katherine', 'James', 'Emily', 'Michael', 'Matthew', 'Laura', 'Kevin', 'Jonas'),

score = c(12.5, 9, 16.5, 12, 9, 20, 14.5, 13.5, 8, 19),

attempts = c(1, 3, 2, 3, 2, 3, 1, 1, 2, 1),

qualify = c('yes', 'no', 'yes', 'no', 'no', 'yes', 'yes', 'no', 'no', 'yes')

)

save(exam\_data,file="data.txt")

load("data.txt")

print(file.info("data.txt"))