RPROGRAMMING

REG : 192121081

NAME : Saravanan.R

1 a). Consider two vectors, x, y x=c(4,6,5,7,10,9,4,15) y=c(0,10,1,8,2,3,4,1) What is the value of: x*y

x<-c(4,6,5,7,10,9,4,15)

y<-c(0,10,1,8,2,3,4,1)

> print(x*y)

[1] 0 60 5 56 20 27 16 15

1 b). Consider two vectors, a, b

a=c (1,2,4,5,6) b=c(3,2,4,1,9) What is the value of: cbind(a,b)

Source Code:

a<-c(1,2,4,5,6)

b<-c(3,2,4,1,9)

cbind(a,b)

a b

[1,] 1 3

[2,] 2 2

[3,] 4 4

[4,] 5 1

[5,] 6 9

2. Vector v is c(1,2,3,4) and list x is list(5:8), what is the output of v*x[1]?

```
v<-c(1,2,3,4)

x <- list(5:8)

print(v*x[1])
```

Error in v * x[1] : non-numeric argument to binary operator

3. Vector v is c(1,2,3,4) and list x is list(5:8), what is the output of v*x[[1]]?

Source Code:

```
v<-c(1,2,3,4)

x <-list(5:8)

print(v*x[[1]])
```

```
>print(v*x[[1]])

[1] 5 12 21 32
```

4. X is the vector c(5,9.2,3,8.51,NA), What is the output of mean(x)?

Source Code:

```
v<-c(5,9.2,3,8.51,NA)

print(mean(v))
```

```
>print(mean(v))

[1] NA
```

5. Give a function in R that replaces all missing values of a vector x with the sum of elements of that vector?

```
replace<-function(v){

ifelse(is.na(v),sum(v,na.rm = T),v)

}
```

```
replace(v=c(1,2,3,NA,5,6,NA,8))

>replace(v=c(1,2,3,NA,5,6,NA,8))

[1] 1 2 3 25 5 6 25 8
```