

ACADGILD ASSIGNMENT 3.3

1. Define matrix `mymat` by replicating the sequence 1:5 for 4 times and transforming into a matrix, sum over rows and columns.

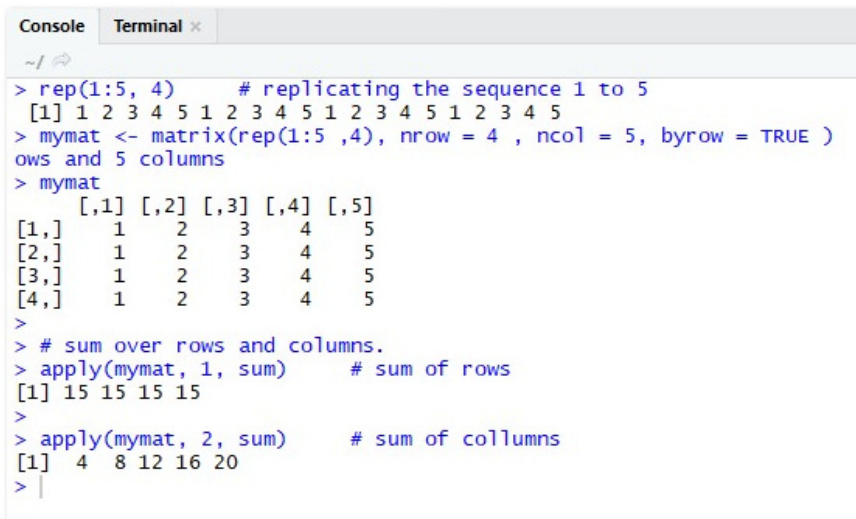
ANSWER:

```
mymat <- matrix(rep(1:5, 4), ncol = 4)
```

```
mymat [,1] [,2] [,3] [,4] [1,] 1 1 1 1 [2,] 2 2 2 2 [3,] 3 3 3 3 [4,] 4 4 4 4 [5,] 5 5 5 5
```

```
apply(mymat, 1, sum) [1] 4 8 12 16 20
```

```
apply(mymat, 2, sum) [1] 15 15 15 15
```



```
Console Terminal x
~/
> rep(1:5, 4)      # replicating the sequence 1 to 5
[1] 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5
> mymat <- matrix(rep(1:5,4), nrow = 4 , ncol = 5, byrow = TRUE )
ows and 5 columns
> mymat
      [,1] [,2] [,3] [,4] [,5]
[1,]    1    2    3    4    5
[2,]    1    2    3    4    5
[3,]    1    2    3    4    5
[4,]    1    2    3    4    5
>
> # sum over rows and columns.
> apply(mymat, 1, sum)      # sum of rows
[1] 15 15 15 15
>
> apply(mymat, 2, sum)      # sum of collumns
[1]  4  8 12 16 20
> |
```