Problem Statement

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

Answer:

Step 1: Replicating the sequence 1:5 using replicate function and storing in mymat variable

Step2: Using apply function on rows(1) and columns(2) to get the sums over rows and columns.

R script is attached for reference.

```r
1   mymat<- replicate(4, 1:5) ##Using replicate to replicate the sequence in mymat
2   mymat
3
4   #Using apply functions on matrix
5   apply(mymat, 1, sum) ## Sum of rows
6   apply(mymat, 2, sum) ## Sum of columns
7
```

1:79   (Top Level)   R Script

Console **Terminal** ✕

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```r
> mymat<- replicate(4, 1:5)
> 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
> mymat1<- matrix(rep(seq(5),4), ncol=5)
> mymat1
     [,1] [,2] [,3] [,4] [,5]
[1,]    1    5    4    3    2
[2,]    2    1    5    4    3
[3,]    3    2    1    5    4
[4,]    4    3    2    1    5
> |
```