



ACADGILD

SESSION 3: FOUNDATIONAL R PROGRAMMING

Assignment 3

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.

Solution :

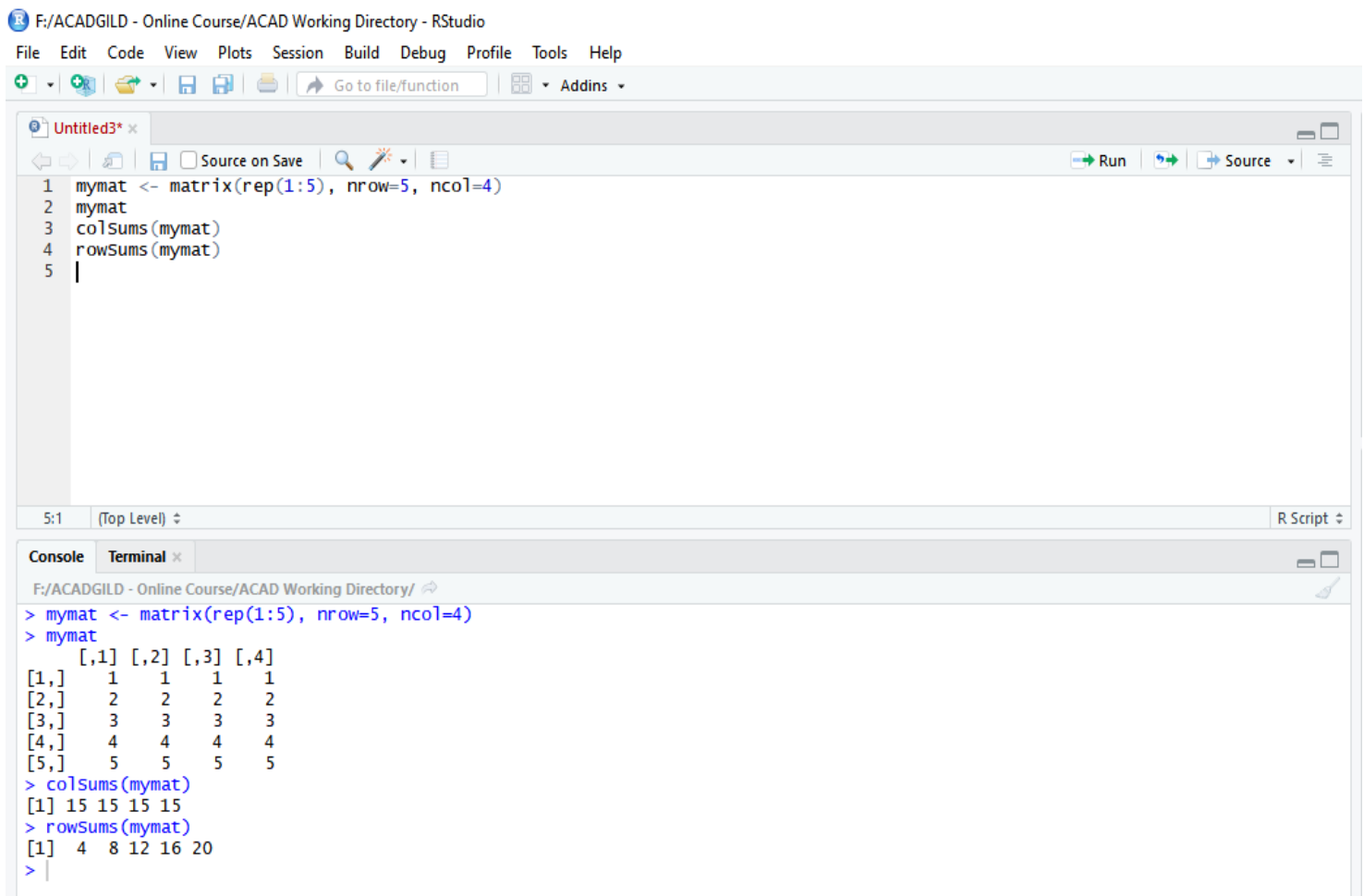
```
mymat <- matrix(rep(1:5), nrow=5, ncol=4)
```

```
mymat
```

```
colSums(mymat)
```

```
rowSums(mymat)
```

The Output of R-Script is shown below :



The screenshot shows the RStudio interface. The top menu bar includes File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, and Help. The toolbar contains icons for saving, running, and other functions. The main editor window, titled 'Untitled3*', contains the following R script:

```
1 mymat <- matrix(rep(1:5), nrow=5, ncol=4)
2 mymat
3 colSums(mymat)
4 rowSums(mymat)
5 |
```

The bottom panel shows the Console output:

```
> mymat <- matrix(rep(1:5), nrow=5, 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
> colSums(mymat)
[1] 15 15 15 15
> rowSums(mymat)
[1]  4  8 12 16 20
> |
```