

2.2

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

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

```
mymat
```

```
#sum on Rows
```

```
apply(mymat, 1, sum)
```

```
or
```

```
rowSums(mymat)
```

```
#sum on columns
```

```
apply(mymat, 2, sum)
```

```
or
```

```
colSums(mymat)
```

```
> mymat<-matrix(rep(seq(5), 4), ncol = 5)
> mymat
      [,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
> apply(mymat, 1, sum)
[1] 15 15 15 15
> apply(mymat, 2, sum)
[1] 10 11 12 13 14
```

```
> rowSums(mymat)
[1] 15 15 15 15
```