

### Assignment 3.1

1. Create a numerical vector to store the odd numbers between 1 to 100

R commands:

```
A <- (1:50)*2-1
```

```
A
```

```
Console ~/
> A <- (1:50)*2-1
> A
[1] 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45
[24] 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85 87 89 91
[47] 93 95 97 99
> |
```

2. Create the numerical vector with following values

1,2,3,4,5,8,6,2,11

Create 3x3 matrix from the vector

R Commands:

```
A <- c(1,2,3,4,5,8,6,2,11)
```

```
A
```

```
MyMatrix <- matrix(A, nrow = 3, ncol = 3)
```

```
MyMatrix
```

```
Console ~/
> A <- c(1,2,3,4,5,8,6,2,11)
> A
[1] 1 2 3 4 5 8 6 2 11
> MyMatrix <- matrix(A, nrow = 3, ncol = 3)
> MyMatrix
      [,1] [,2] [,3]
[1,] 1    4    6
[2,] 2    5    2
[3,] 3    8   11
> |
```

3. Consider the following vector `a<-c(NA,11:15,NA,NA)` remove all the NA and find the mean of the vector

R Commands:

```
A <- c(NA,11:15,NA,NA)
```

```
A
```

```
mean(A, na.rm = T)
```

```
Console ~/
> A <- c(NA,11:15,NA,NA)
> A
[1] NA 11 12 13 14 15 NA NA
> mean(A, na.rm = T)
[1] 13
> |
```

4. Consider the vector `x=c("apple","banana","grape")`

Replace the first occurrence of a with '\$'

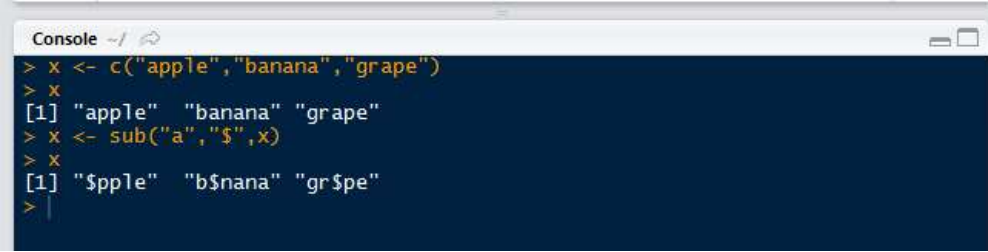
R Commands:

```
x <- c("apple","banana","grape")
```

```
x
```

```
x <- sub("a","$",x)
```

```
x
```



```
Console ~/ /
> x <- c("apple","banana","grape")
> x
[1] "apple" "banana" "grape"
> x <- sub("a","$",x)
> x
[1] "$pple" "b$nanan" "gr$pe"
> |
```