# Practical.1

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14 Aug 2025

Q.1 Create a numeric vector containing numbers 1,2,6,7,3,4,5,9,10

```
> x=c(1,2,6,7,3,4,5,9,10,11,12)
> x

 [1]  1  2  6  7  3  4  5  9 10 11 12
```

Q.2 Create a character vector containing the element "Apple","Banana","Cherry,"Guava".

```
> x2=c("apple","banana","guava","cherry")
> x2

[1] "apple"  "banana" "guava"  "cherry"
```

Q.3 Create a logical vector of length 7,where the first four elements are TRUE and last three are FALSE.

```
> x3=c(TRUE,TRUE,TRUE,TRUE,FALSE,FALSE,FALSE)
> x3

[1]  TRUE  TRUE  TRUE  TRUE FALSE FALSE FALSE
```

Q.4 Create a sequence from 0 - 1 of length 54 and also create another sequence of numbers 100 to 50 decreasing by 5.

```
> x4=seq(0,1,length.out=54)
> x4

 [1] 0.00000000 0.01886792 0.03773585 0.05660377 0.07547170 0.09433962
 [7] 0.11320755 0.13207547 0.15094340 0.16981132 0.18867925 0.20754717
[13] 0.22641509 0.24528302 0.26415094 0.28301887 0.30188679 0.32075472
[19] 0.33962264 0.35849057 0.37735849 0.39622642 0.41509434 0.43396226
[25] 0.45283019 0.47169811 0.49056604 0.50943396 0.52830189 0.54716981
[31] 0.56603774 0.58490566 0.60377358 0.62264151 0.64150943 0.66037736
[37] 0.67924528 0.69811321 0.71698113 0.73584906 0.75471698 0.77358491
[43] 0.79245283 0.81132075 0.83018868 0.84905660 0.86792453 0.88679245
[49] 0.90566038 0.92452830 0.94339623 0.96226415 0.98113208 1.00000000
```

```
> x4.1=seq(100,50,by=-5)
> x4.1

 [1] 100  95  90  85  80  75  70  65  60  55  50
```

Q.5[a].Create a vector that repeat elements 1,2,3,4&5 in the pattern and the pattern (1,1,2,2,3,3,4,4,5,5) using rep function.

```
> x5=c(1,2,3,4,5)
> rep(x5,each=2)

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

[b]. Generate a vector that's repeats an elements of c("A,"B","C") but with varying length ,a repeated 2 times b repeated 3 time c 4 times

```
> x6=c("A","B","c")
> x6

[1] "A" "B" "c"

> rep(x6,c(2,3,4))

[1] "A" "A" "B" "B" "B" "c" "c" "c" "c"

>             #or
> rep(c("A","B","C"),times=c(2,3,4))

[1] "A" "A" "B" "B" "B" "C" "C" "C" "C"

>         #for repeat
> rep(c(1,2,3),c(2,6,7))

 [1] 1 1 2 2 2 2 2 2 3 3 3 3 3 3 3
```

[c].use rep function to repeat the vector c(1,2,3) three times."

```
> x7=rep(c(1,2,3),3)
> x7

[1] 1 2 3 1 2 3 1 2 3
```