REPEAT AND REPLICATE FUNCTION IN R

In this Tutorial we will learn Repeat and Replicate function in R. Repeat and Replicate are import among the R functions.

Repeat Function in R:

The **Repeat Function(loop) in R** executes a same block of code iteratively until a stop condition is met.

Syntax for Repeat Function in R::

The basic syntax for creating a repeat loop in R is –

```
repeat {
if(condition) {
break
}
}
```

repeat loop in R, is similar to while and for loop, it will execute a block of commands repeatedly till break.

Example :

```
1
2   # repeat loop in R or repeat function in r
3
4   sum <- 0
5   repeat{
6     sum = sum+1
7     print(sum)
8     if (sum == 6){
9     print("repeat loop ends");
10    break
11    }
11  }
```

In the above example repeat loop will sum up the value until it reaches 6. Once it reaches six it prints "repeat loop ends" and breaks the loop, so the output will be

Output:

```
[1] 1
[1] 2
[1] 3
[1] 4
[1] 5
[1] 6
```

```
[1] "repeat loop ends"
```

Replicate Function in R:

Rep() is the function in R that replicates the values

Syntax for Replicate Function in R:

1. rep(value,number_of_times)
2. rep(sequence,each,number_of_times)

Example1:

```
1# replicate values with specific number of times
2
3rep(2,10)
```

In the above example 2 is replicated 10 times

output1:

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

Example2:

```
1# Replicate function in R with length attribute
2
3rep(1:4,len=20)
```

In the above example sequence 1 to 4 is replicated until the length reaches 20 elements

output2:

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

Replicate the List in R:

Replicate function in R is also used to replicate the list

Example

```
1## replicate a list - with replicate function in R
2
3fred <- list(rating = 1:5)
4rep(fred, 3)
```

in the above example list of ratings from 1 to 5 is replicated thrice. So the output will be

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