

### **# R Repeat Loop**

```
x = 1
repeat {
  # starting of repeat statements block
  print(x)
  x = x+1
  # ending of repeat statements block
  if(x>6){ # breaking condition
    break
  }
}
```

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

---

### **#-R While loop**

```
x=1
while (x < 6) {
  print(x)
  x = x+1
}
```

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

---

### **# A for loop**

```
x = c(12, 45, 19, 2)
for(i in x) {
  print(i)
}
```

[1] 12  
[1] 45  
[1] 19  
[1] 2

Break statement inside for loop

```
x = c(12, 45, 19, 2)
```

```
for(i in x) {  
  if(i==19){  
    break  
  }  
  print(i)  
}
```

Output:

```
[1] 12
```

```
[1] 45
```

Below is an example to count the number of even numbers in a vector.

```
x <- c(2,4,7,1,18,12,10,25)
```

```
count <- 0
```

```
for (val in x) {  
  if(val %% 2 == 0) count = count+1  
}
```

```
print(count)
```

```
[1] 5
```

```
x <- LETTERS[1:4]
```

```
for (i in x) {  
  print(i)  
}
```

```
[1] "A"
```

```
[1] "B"
```

```
[1] "C"
```

```
[1] "D"
```

---

# create a simple for-loop that iterates through the four numbers of 0:3  
and prints

```
> for(var in 0:3)
```

```
{  
  print(var)  
}
```

[1] 0

[1] 1

[1] 2

[1] 3

**#Next Statement**

```
x <- c(0:10)
```

```
for (i in x) {
```

```
  if(i == 5){
```

```
    next
```

```
  }
```

```
  print(i)
```

```
}
```

Output:

[1] 0

[1] 1

[1] 2

[1] 3

[1] 4

[1] 6

[1] 7

[1] 8

[1] 9

[1] 10

---