

How to Loop Through List in R (3 Examples)?

Authored by
stats writer

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In R, there are several ways to loop through a list. The most common are the for loop, the while loop, and the apply family of functions. The for loop is used to iterate over each item in a list, the while loop is used to loop through a list while a condition is true, and the apply functions are used to apply a function to each item in a list. Each of these looping approaches has its own advantages and disadvantages, and can be used to efficiently and effectively loop through a list.

You can use one of the following methods to loop through a list in R:

Method 1: Loop Through List & Display All Sub-Elements on Same Line

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

Method 2: Loop Through List & Display All Sub-Elements on Different Lines

```
for (i in my_list) {  
  for(j in i)  
  {print(j)}  
}
```

Method 3: Loop Through List & Only Display Specific Values

```
#only display first value in each element of list  
for(i in 1:length(my_list)) {  
  print(my_list[i])  
}
```

The following examples show how to use each of these methods with the following list in R:

```
#create list  
team_info <- list(team = 'Mavericks',  
  positions = c('G', 'F', 'C'),  
  all_stars = 3)
```

```
#view list  
team_info
```

```
$team  
"Mavericks"
```

```
$positions  
"G" "F" "C"
```

```
$all_stars  
3
```

Example 1: Loop Through List & Display All Sub-Elements on Same Line

The following code shows how to loop through the list and display each sub-element on the same line:

```
#print each sub-element on same line  
for (i in team_info) {  
  print(i)  
}
```

```
"Mavericks"  
"G" "F" "C"  
3
```

Notice that each sub-element is printed on the same line.

Example 2: Loop Through List & Display All Sub-Elements on Different Lines

The following code shows how to loop through the list and display each sub-element on different lines:

```
#print each sub-element on different lines  
for (i in team_info) {  
  for(j in i)  
    {print(j)}  
  }
```

```
"Mavericks"  
"G"  
"F"  
"C"  
3
```

Notice that each sub-element is printed on its own line.

Example 3: Loop Through List & Only Display Specific Values

The following code shows how to loop through the list and display each sub-element on different lines:

```
#only display first value in each element of list  
for(i in 1:length(team_info)) {  
  print(team_info)  
}
```

"Mavericks"

"G"

3

Notice that only the first value in each element of the list is displayed.

Note: Simply change the to display a different value in each element. For example, you could use to display only the second value in each element.