

How can I loop through a list in R?

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Looping through a list in R refers to the process of accessing and performing operations on each element of the list. This can be achieved by using a variety of loop structures, such as for loops, while loops, or apply functions. By looping through a list, one can efficiently manipulate and analyze large amounts of data, making it a fundamental skill for data analysis and programming in R.

Loop Through List in R (3 Examples)

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[i])  
}
```

```
"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.

Additional Resources

ARABPSYCHOLOGY.COM