

How do you create an empty list in R, and what are some examples of using it?

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Creating an empty list in R is a simple process that involves using the "list()" function with no arguments. This will create a list with no elements, essentially making it an empty list.

An empty list can be useful in various situations in R, such as when you want to store data or objects that will be added to the list later on. It can also be used as a placeholder for data that will be generated or manipulated through code.

For example, if you are working with a dataset that contains information on different countries, you can create an empty list to store the data for each country separately. This allows you to easily add or remove countries from the list as needed.

Another example is when you are creating a function that will output multiple results. You can use an empty list to store these results and then add them to the list as the function runs.

In summary, creating an empty list in R is a useful tool that allows you to store and manipulate data efficiently. It can be used for a variety of purposes, such as organizing data, storing function outputs, or creating placeholders for future data.

Create an Empty List in R (With Examples)

You can use the following syntax to create an empty list in R:

```
#create empty list with length of zero
```

```
empty_list <- list()
```

```
#create empty list of length 10
```

```
empty_list <- vector(mode='list', length=10)
```

The following examples show how to use these functions in practice.

Example 1: Create Empty List in R with Length of Zero

The following code shows how to create an empty list with a length of zero in R:

```
#create empty list
```

```
empty_list <- list()
```

```
#verify that empty_list is of class 'list'
```

```
class(empty_list)
```

```
"list"
```

```
#view length of list
```

```
length(empty_list)
```

```
0
```

The result is a list with a length of 0.

Example 2: Create Empty List in R with Specific Length

The following code shows how to create an empty list of length 8 in R:

```
#create empty list of length 8
```

```
empty_list <- vector(mode='list', length=8)
```

```
#verify that empty_list is of class 'list'
```

```
class(empty_list)
```

```
"list"
```

```
#view list
```

```
empty_list
```

```
[
```

```
NULL
```

```
]
```

```
NULL
```

```
[
```

```
NULL
```

```
[
```

```
NULL
```

```
[
```

```
NULL
```

```
]
```

```
NULL
```

```
]
```

NULL

]

NULL

The result is a list with a length of 8 in which every element in the list is NULL.

Example 3: Append Values to Empty List in R

One of the most common reasons to create an empty list is to then fill it with values using a loop.

The following code shows how to create an empty list, then fill it with values:

```
#create empty list of length 8  
empty_list <- vector(mode='list', length=8)  
  
#get length of list  
len <- length(empty_list)  
  
#define values to append to list  
new <- c(3, 5, 12, 14, 17, 18, 18, 20)  
  
#fill values in list  
i = 1
```

```
while(i <= length(new)) {  
empty_list] <- new  
i <- i + 1  
}
```

```
#display updated list  
empty_list
```

```
] 
```

```
3
```

```
] 
```

```
5
```

```
] 
```

```
12
```

```
] 
```

```
14
```

```
] 
```

```
17
```

```
] 
```

```
18
```

```
]
18
```

```
]
20
```

Notice that the empty list is now filled with the new values that we specified.

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