

# How do you create an empty vector in R? Can you provide examples?

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## RECOMMENDED CITATION

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To create an empty vector in R, you can use the function "vector()" and specify the length and type of the vector. For example, to create an empty vector of length 5 with numeric values, you would use the code "vector(mode = "numeric", length = 5)". Similarly, to create an empty vector with character values, you would use "vector(mode = "character", length = 5)". Another way to create an empty vector in R is by using the shorthand notation "numeric(0)" or "character(0)". These methods will create an empty vector of the specified length and type, ready to be filled with data.

## Create an Empty Vector in R (With Examples)

You can use one of the following methods to create an empty vector in R:

```
#create empty vector with length zero and no specific class
```

```
empty_vec <- vector()
```

```
#create empty vector with length zero and a specific class
```

```
empty_vec <- character()
```

```
#create empty vector with specific length
```

```
empty_vec <- rep(NA, times=10)
```

The following examples show how to use each of these methods in practice.

**Method 1: Create Empty Vector with Length Zero**

The following code shows how to create a vector with a length of zero and no specific class:

```
#create empty vector with length zero and no specific class
```

```
empty_vec <- vector()
```

```
#display length of vector
```

```
length(empty_vec)
```

```
0
```

We can then fill the vector with values if we'd like:

```
#add values 1 through 10 to empty vector
```

```
empty_vec <- c(empty_vec, 1:10)
```

```
#view updated vector
```

```
empty_vec
```

```
1 2 3 4 5 6 7 8 9 10
```

Method 2: Create Empty Vector of Specific Class

The following code shows how to create empty vectors of specific classes:

```
#create empty vector of class 'character'  
empty_vec <-  
character()
```

```
class(empty_vec) "character"
```

```
#create empty vector of class 'numeric'  
empty_vec <- numeric()
```

```
class(empty_vec)
```

```
numeric(0)
```

```
#create empty vector of class 'logical'  
empty_vec <- logical()
```

```
class(empty_vec)
```

```
logical(0)
```

**Method 3: Create Empty Vector with Specific Length**

**The following code shows how to create a vector with a specific length in R:**

```
#create empty vector with length 10  
empty_vec <- rep(NA, times=10)
```

```
#display empty vector
```

```
empty_vec
```

```
NA NA NA NA NA NA NA NA NA NA
```

**If you know the length of the vector at the outset, this is the most memory-efficient solution in R.**

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