

How can I create a vector in R with random numbers?

Authored by
stats writer

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To create a vector in R with random numbers, you can use the "sample" function. This function allows you to specify the length of the vector and the range of numbers from which the random numbers will be generated. The syntax for using the "sample" function is as follows: `sample(x, size, replace = FALSE)`. X represents the range of numbers, size is the desired length of the vector, and replace specifies whether the numbers can be repeated or not. By setting replace to TRUE, you can create a vector with repeated random numbers. This function is useful for generating data for statistical analysis or simulation purposes.

Create a Vector with Random Numbers in R

You can use one of the following methods to create a vector with random numbers in R:

Method 1: Create Vector with Random Values in Range

```
#create vector of 10 random values between 1 and 20  
runif(n=10, min=1, max=20)
```

Method 2: Create Vector with Random Integers in Range

```
#create vector of 10 random integers between 1 and 20  
round(runif(n=10, min=1, max=20), 0)
```

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

Method 1: Create Vector with Random Values in Range

The following code shows how to create a vector of 10

random values between 1 and 20:

#make this example reproducible

set.seed(1)

#create vector with 10 random numbers between 1 and 20

random_vec <- runif(n=10, min=1, max=20)

#view vector

random_vec

**6.044665 8.070354 11.884214 18.255948 4.831957
18.069404 18.948830
13.555158 12.953167 2.173939**

Note that set.seed() ensures that we will get the same random numbers each time.

If we remove set.seed(), the random numbers will be different each time we run the code.

Method 2: Create Vector with Random Integers in Range

The following code shows how to create a vector of 10 random integers between 1 and 50:

```
#make this example reproducible  
set.seed(1)
```

```
#create vector with 10 random numbers between 1 and  
50
```

```
random_vec <- round(runif(n=10, min=1, max=50), 0)
```

```
#view vector  
random_vec
```

```
14 19 29 46 11 45 47 33 32 4
```

Note that the `round()` function simply rounds the values created by the `runif()` function to the nearest whole number.

Also note that the `runif()` function generates random numbers, *including* the min and max values.

For example, it's possible that the vector above could have included both 1 and 50.