

What should be returned if there are no non-missing arguments to the min function?

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RECOMMENDED CITATION

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If there are no non-missing arguments provided to the min function, it should return a null or undefined value, indicating that there is no minimum value to be determined.

Fix: no non-missing arguments to min; returning Inf

One warning message you may encounter in R is:

Warning message:

In min(data) : no non-missing arguments to min; returning Inf

This warning message appears whenever you attempt to find the minimum or maximum value of a vector that has a length of zero.

It's important to note that this is only a warning message and it won't actually prevent your code from running.

However, you can use one of the following methods to avoid this warning message entirely:

Method 1: Suppress the Warning Message

suppressWarnings(min(data))

Method 2: Define a Custom Function to Calculate the Min or Max

```
#define custom function to calculate min  
custom_min <- function(x) {if (length(x)>0) min(x) else  
Inf}
```

```
#use custom function to calculate min of data  
custom_min(data)
```

The following examples show how to use each method in practice.

Method 1: Suppress the Warning Message

Suppose we attempt to use the min() function to find the minimum value of a vector with a length of zero:

```
#define vector with no values  
data <- numeric(0)  
  
#attempt to find min value of vector  
min(data)
```

Inf

Warning message:

In min(data) : no non-missing arguments to min; returning Inf

Notice that we receive a warning message that tells us we attempted to find the minimum value of a vector with no non-missing arguments.

To avoid this warning message, we can use the suppressWarnings() function:

```
#define vector with no values
```

```
data <- numeric(0)
```

```
#find minimum value of vector
```

```
suppressWarnings(min(data))
```

Inf

The minimum value is still calculated to be "Inf" but we receive no warning message this time.

Method 2: Define a Custom Function

Another way to avoid the warning message is to define a custom function that only calculates the minimum value if the length of a vector is greater than zero,

otherwise a value of "Inf" is returned:

```
#define vector with no values
```

```
data <- numeric(0)
```

```
#define custom function to calculate min
```

```
custom_min <- function(x) {if (length(x)>0) min(x) else  
Inf}
```

```
#use custom function to calculate min
```

```
custom_min(data)
```

```
Inf
```

Notice that the minimum value is calculated to be "Inf" and we receive no warning message.

Additional Resources

The following tutorials explain how to troubleshoot other common errors in R:

[How to Fix in R: longer object length is not a multiple of shorter object length](#)