

How to Fix: error in sort.int(x, na.last, decreasing, ...) : 'x' must be atomic in R?

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June 29, 2024

RECOMMENDED CITATION

stats writer (2024). *How to Fix: error in sort.int(x, na.last, decreasing, ...) : 'x' must be atomic in R?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=158617>

The error "'x' must be atomic" in the context of using the "Fix" function in R means that the input variable, "x," needs to be a single vector or scalar value, rather than a complex data structure such as a matrix or data frame. This is because the "Fix" function is designed to operate on individual values, rather than on a larger data set. To resolve this error, make sure that the input variable "x" is a single vector or scalar value. If it is not already, you can convert it to one using functions such as "as.vector()" or "as.numeric()". Alternatively, you may need to restructure your data in a way that allows the "Fix" function to operate on it properly.

Fix in R: error in sort.int(x, na.last, decreasing, ...) : 'x' must be atomic

One error message you may encounter when using R is:

**Error in sort.int(x, na.last = na.last, decreasing = decreasing, ...) :
'x' must be atomic**

This error occurs when you attempt to sort a list.

By default, R is only capable of sorting atomic objects like vectors. Thus, to use sort() with a list you must first use the unlist() function.

The following example shows how to resolve this error in practice.

How to Reproduce the Error

Suppose we have the following list in R:

```
#create list
```

```
some_list <- list(c(4, 3, 7), 2, c(5, 12, 19))
```

```
#view list
```

```
some_list
```

```
[
```

```
4 3 7
```

```
]
```

```
2
```

```
[
```

```
5 12 19
```

```
#view class
```

```
class(some_list)
```

```
"list"
```

Now suppose we attempt to sort the values in the list:

```
#attempt to sort the values in the list
```

```
sort(some_list)
```

```
Error in sort.int(x, na.last = na.last, decreasing =  
decreasing, ...) :  
'x' must be atomic
```

We receive an error because R is not capable of sorting lists directly.

How to Avoid the Error

To avoid the error, we must first use the `unlist()` function as follows:

```
#sort values in list  
sort(unlist(some_list))
```

```
2 3 4 5 7 12 19
```

Notice that we're able to successfully sort the list of values without any error because we first used `unlist()`, which converted the list to a numeric vector.

By default, R sorts the values in ascending order.

However, we can use `decreasing=TRUE` to sort the

values in descending order instead:

```
#sort values in list in descending order  
sort(unlist(some_list), decreasing=TRUE)
```

19 12 7 5 4 3 2

Notice that the values are now sorted in descending order.

Additional Resources

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