

Why should the function $n()$ not be called directly?

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The function n() should not be called directly as it is designed to be used as a helper function within a larger code structure. Directly calling the function may lead to unexpected results or errors, as it may not have access to all the necessary variables and parameters. Additionally, calling the function directly goes against the principles of modular and organized coding practices. It is recommended to only call the function n() through its designated caller function in order to ensure proper functionality and maintain the integrity of the code.

Fix: Error in n() : This function should not be called directly

One error you may encounter in R is:

Error in n() : This function should not be called directly

This error usually occurs when you attempt to use the n() function from the dplyr package, but you happen to have the plyr package loaded *after* the dplyr package.

This tutorial shares exactly how to fix this error.

How to Reproduce the Error

Suppose we have the following data frame in R:

```
#define data frame
```

```
df <- data.frame(team=rep(c('A', 'B'), each=5),
```

```
points=c(2, 4, 6, 8, 10, 12, 14, 16, 18, 20),
```

```
assists=c(4, 7, 11, 16, 22, 29, 38, 49, 63, 80))
```

```
#view data frame
```

```
df
```

```
team points assists
```

```
1 A 2 4
```

```
2 A 4 7
```

```
3 A 6 11
```

```
4 A 8 16
```

```
5 A 10 22
```

```
6 B 12 29
```

```
7 B 14 38
```

```
8 B 16 49
```

```
9 B 18 63
```

```
10 B 20 80
```

Now suppose we attempt to use the summarize() function from dplyr to count the number of rows, grouped by team:

```
library(dplyr)
```

```
library(plyr)
```

```
#attempt to count rows by team
```

```
df %>%
```

```
group_by(team) %>%
```

```
summarize(count = n())
```

Error in n() : This function should not be called directly

We receive an error because we loaded the plyr package after the dplyr package, which causes issues.

How to Fix the Error

The way to fix this error is to simply use dplyr::summarize so that R knows exactly which package you'd like to use the summarize function from:

```
library(dplyr)
```

```
library(plyr)
```

```
#count rows by team
```

```
df %>%
```

```
group_by(team) %>%
```

```
dplyr::summarize(count = n())
```

```
# A tibble: 2 x 2
```

```
team count
```

```
1 A 5
```

```
2 B 5
```

Notice that we're able to count the number of rows grouped by team without any error this time since we used `dplyr::summarize` to perform the summary.

Additional Resources

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

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