

Fix: error in FUN(newx[, i], ...) : invalid 'type' (character) of argument

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Fix: error in FUN(newx, ...) : invalid 'type' (character) of argument

One error you may encounter in R is:

Error in sum(x) : invalid 'type' (character) of argument

This error occurs when you attempt to perform some mathematical operation (like taking the sum, mean, count, etc.) on a character vector.

This tutorial shares how to resolve this error in practice.

How to Reproduce the Error

Suppose we create the following data frame in R:

```
#create data frame
df <- data.frame(team=c('A', 'A', 'A', 'B', 'B', 'B'),
  points=c(10, 12, 15, 20, 26, 25),
  rebounds=c(7, 8, 8, 14, 10, 12))
```

```
#view data frame
df
```

```
team points rebounds
1 A 10 7
2 A 12 8
3 A 15 8
4 B 20 14
5 B 26 10
6 B 25 12
```

Now suppose we attempt to calculate the sum of the 'team' column:

```
#attempt to calculate sum of values in 'team' column
sum(df$team)
Error in sum(df$team) : invalid 'type' (character) of argument
```

We receive an error because the 'team' column is a character column.

We can confirm this by using the **class()** function:

```
#view class of 'team' column  
class(df$team)
```

```
"character"
```

How to Fix the Error

The way to get around this error is to only use mathematical operations with numeric vectors.

For example, we could use the **sum()** function to calculate the sum of the values in the 'points' column:

```
#calculate sum of values in 'points' column  
sum(df$points)
```

```
108
```

We could also calculate the sum of the points values, grouped by team:

```
#calculate sum of points, grouped by team  
aggregate(points ~ team, df, sum)
```

```
team points
```

```
1 A 37
```

```
2 B 71
```

We could even calculate the sum of the points *and* rebounds values, grouped by team:

```
#calculate sum of points and sum of rebounds, grouped by team  
aggregate(. ~ team, df, sum)
```

```
team points rebounds
```

```
1 A 37 23
```

```
2 B 71 36
```

Notice that we don't receive an error with any of these operations because we're only attempting to calculate the sum for numeric variables.

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

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