

How can I add a column to a data frame in R if it does not already exist?

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To add a column to a data frame in R, you can use the "cbind" function if the column does not already exist. This function allows you to combine the existing data frame with a new column, creating a new data frame with the added column. The new column must have the same number of rows as the existing data frame. You can also use the "mutate" function from the dplyr package to add a new column with a specific name and values to an existing data frame. Alternatively, you can use the "transform" function to add multiple columns to a data frame at once. Both "mutate" and "transform" functions create a new data frame with the added columns, leaving the original data frame unchanged.

Add Column If It Does Not Exist in R

You can use the following custom function to add one or more columns to a data frame in R if they do not already exist:

```
add_cols <- function(df, cols) {  
  add <- cols  
  if(length(add) != 0) df <- NA  
  return(df)  
}
```

The following example shows how to use this syntax in practice.

Example: Add Column If It Does Not Exist in R

Suppose we have the following data frame in R:

#create data frame

```
df <- data.frame(team=c('A', 'A', 'A', 'A', 'B', 'B', 'B'),  
position=c('Gu', 'Fo', 'Fo', 'Fo', 'Gu', 'Gu', 'Fo'),  
points=c(18, 22, 19, 14, 14, 11, 20))
```

```
#view data frame
```

```
df
```

```
team position points
```

```
1 A Gu 18
```

```
2 A Fo 22
```

```
3 A Fo 19
```

```
4 A Fo 14
```

```
5 B Gu 14
```

```
6 B Gu 11
```

```
7 B Fo 20
```

Suppose we would like to add the following columns to the data frame if they do not already exist:

```
pointsassistsrebounds
```

We can use a custom function called `add_cols` to do so:

```
#define custom function to add columns to data frame if  
they do not exist
```

```
add_cols <- function(df, cols) {  
  add <- cols  
  if(length(add) !=0 ) df <- NA  
  return(df)  
}  
  
#add three columns if they don't already exist  
df <- add_cols(df, c('points', 'assists', 'rebounds'))  
  
#view updated data frame  
df  
  
team position points assists rebounds  
1 A Gu 18 NA NA  
2 A Fo 22 NA NA  
3 A Fo 19 NA NA  
4 A Fo 14 NA NA  
5 B Gu 14 NA NA  
6 B Gu 11 NA NA  
7 B Fo 20 NA NA
```

Notice that the assists and rebounds columns were added to the data frame while the points column was not since it already existed.

Also note that R simply fills in each value in the new columns with NA values.

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