

Can different columns be combined from two data frames in R?

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In R, it is possible to combine different columns from two separate data frames. This can be done by using functions such as `cbind()` or `merge()`, which allow for the merging of columns based on a shared identifier or index. This process is commonly used in data analysis and manipulation to merge data from multiple sources into a single data frame. The resulting combined data frame can then be used for further analysis and visualization.

Combine Two Data Frames in R with Different Columns

You can use the `bind_rows()` function from the package in R to quickly combine two data frames that have different columns:

```
library(dplyr)
bind_rows(df1, df2)
```

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

Example: Combine Two Data Frames with Different Columns

Suppose we have the following two data frames in R:

```
#define first data frame
df1 <- data.frame(A=c(1, 6, 3, 7, 5),
                  B=c(7, 9, 8, 3, 2),
                  C=c(3, 5, 2, 9, 9))
```

```
df1
```

A B C

1 1 7 3

2 6 9 5

3 3 8 2

4 7 3 9

5 5 2 9

#define second data frame

df2 <- data.frame(B=c(1, 3, 3, 4, 5),

C=c(7, 7, 8, 3, 2),

D=c(3, 3, 6, 6, 8))

df2

B C D

1 1 7 3

2 3 7 3

3 3 8 6

4 4 3 6

5 5 2 8

Note that df1 has the following column names:

ABC

And note that df2 has the following column names:

BCD

The column names don't match, so the function in R will throw an error if we attempt to use it.

```
#attempt to use rbind to row bind data frames  
rbind(df1, df2)
```

```
Error in match.names(clabs, names(xi)) :  
names do not match previous names
```

Instead, we can use the `bind_rows()` function from the `dplyr` package to combine these two data frames and simply fill in missing values in the resulting data frame with NA values:

```
library(dplyr)  
  
#combine df1 and df2  
bind_rows(df1, df2)
```

```
A B C D  
1 1 7 3 NA  
2 6 9 5 NA
```

3 3 8 2 NA

4 7 3 9 NA

5 5 2 9 NA

6 NA 1 7 3

7 NA 3 7 3

8 NA 3 8 6

9 NA 4 3 6

10 NA 5 2 8

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