

How can we drop columns from a data frame in R? Can you provide some examples?

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Dropping columns from a data frame in R refers to removing specific columns of data from a larger dataset. This can be achieved by using the "subset" function and specifying which columns to drop. For example, if we have a data frame called "df" with columns labeled "A", "B", and "C", we can drop the "C" column by using the code "df <- subset(df, select = -C)". This will create a new data frame without the "C" column. Other methods for dropping columns include using the "select" function from the "dplyr" package or indexing the columns to be dropped using negative numbers. Ultimately, dropping columns allows for more efficient and focused analysis on a specific subset of data within a larger dataset.

Drop Columns from Data Frame in R (With Examples)

The easiest way to drop columns from a data frame in R is to use the `subset()` function, which uses the following basic syntax:

```
#remove columns var1 and var3  
new_df <- subset(df, select = -c(var1, var3))
```

The following examples show how to use this function in practice with the following data frame:

```
#create data frame  
df <- data.frame(var1=c(1, 3, 3, 4, 5),  
var2=c(7, 7, 8, 3, 2),  
var3=c(3, 3, 6, 10, 12),  
var4=c(14, 16, 22, 19, 18))
```

```
#view data frame
```

df

var1 var2 var3 var4

1 1 7 3 14

2 3 7 3 16

3 3 8 6 22

4 4 3 10 19

5 5 2 12 18

Example 1: Drop Columns by Name

The following code shows how to drop columns from the data frame by name:

#remove columns var1 and var3

new_df <- subset(df, select = -c(var1, var3))

#view updated data frame

new_df

var2 var4

1 7 14

2 7 16

3 8 22

4 3 19

5 2 18

Example 2: Drop Columns by Index

The following code shows how to drop columns from the data frame by index:

```
#remove first and fourth columns  
new_df <- subset(df, select = -c(1, 4))
```

```
#view updated data frame
```

```
new_df
```

```
var2 var3
```

```
1 7 3
```

```
2 7 3
```

```
3 8 6
```

```
4 3 10
```

```
5 2 12
```

Example 3: Drop Columns in List

The following code shows how to drop columns from the data frame that belong to a certain list:

```
#define list of columns to remove
```

```
remove_cols <- c('var1', 'var4')
```

```
#remove columns in list
```

```
new_df = subset(df, select = !(names(df) %in%  
remove_cols)) #view updated data frame
```

```
new_df
```

```
var2 var3
```

```
1 7 3
```

```
2 7 3
```

```
3 8 6
```

```
4 3 10
```

```
5 2 12
```

Example 4: Drop Columns in Range

The following code shows how to drop columns from the data frame in a certain range:

```
#remove columns in range of 1 to 3
```

```
new_df = subset(df, select = -c(1:3)) #view updated data  
frame
```

```
new_df
```

```
var4
```

```
1 14
```

```
2 16
```

```
3 22
```

4 19

5 18

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