

# How can I remove rows from a data frame based on a certain condition using the R programming language?

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## RECOMMENDED CITATION

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The process of removing rows from a data frame based on a certain condition using the R programming language involves using the built-in functions and operators available in R to filter out the rows that do not meet the specified condition. This can be achieved by using logical operators, such as "==" or "!=" to compare values in a specific column or by using the "subset" function to create a subset of the data frame with only the desired rows. This technique allows for efficient and precise data manipulation, making it a useful tool for data analysis and management.

## **R: Remove Rows from Data Frame Based on Condition**

**You can use the subset() function to remove rows with certain values in a data frame in R:**

**#only keep rows where col1 value is less than 10 and col2 value is less than 8**

```
new_df <- subset(df, col1<10 & col2<8)
```

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

```
#create data frame
```

```
df <- data.frame(a=c(1, 3, 4, 6, 8, 9),
```

```
b=c(7, 8, 8, 7, 13, 16),
```

```
c=c(11, 13, 13, 18, 19, 22),
```

```
d=c(12, 16, 18, 22, 29, 38))
```

```
#view data frame
```

```
df
```

```
a b c d
1 1 7 11 12
2 3 8 13 16
3 4 8 13 18
4 6 7 18 22
5 8 13 19 29
6 9 16 22 38
```

#### Example 1: Remove Rows Equal to Some Value

The following code shows how to remove all rows where the value in column 'c' is equal to 13:

```
#remove rows where column 'c' is equal to 13
```

```
new_df <- subset(df, c != 13)
```

```
#view updated data frame
```

```
new_df
```

```
a b c d
1 1 7 11 12
4 6 7 18 22
5 8 13 19 29
6 9 16 22 38
```

## Example 2: Remove Rows Equal to One of Several Values

The following code shows how to remove all rows where the value in column 'b' is equal to 7 or 8:

```
#remove rows where value in column b is equal to 7 or 8
```

```
new_df <- subset(df, !(b %in% c(7, 8)))
```

```
#view updated data frame
```

```
new_df
```

```
a b c d
```

```
5 8 13 19 29
```

```
6 9 16 22 38
```

## Example 3: Remove Rows Based on Multiple Conditions

The following code shows how to remove all rows where the value in column 'b' is equal to 7 or where the value in column 'd' is equal to 38:

```
#remove rows where value in column b is 7 or value in column d is 38
```

```
new_df <- subset(df, b != 7 & d != 38)
```

```
#view updated data frame
```

**new\_df**

**a b c d**

**2 3 8 13 16**

**3 4 8 13 18**

**5 8 13 19 29**

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