

# What are four methods for dropping multiple columns in Pandas?

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## RECOMMENDED CITATION

stats writer (2024). *What are four methods for dropping multiple columns in Pandas?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=151888>

There are four main methods for dropping multiple columns in Pandas, which is a popular data analysis library in Python. The first method is to use the "drop" function, which allows you to specify a list of columns to be dropped. The second method is to use the "iloc" function, which allows you to specify the index positions of the columns to be dropped. The third method is to use the "filter" function, which allows you to drop columns based on certain criteria, such as column names or data types. Finally, the fourth method is to use the "select\_dtypes" function, which allows you to drop columns based on their data types. These methods provide flexibility and efficiency in dropping multiple columns from a Pandas dataframe.

## Drop Multiple Columns in Pandas (4 Methods)

You can use the following methods to drop multiple columns from a pandas DataFrame:

### Method 1: Drop Multiple Columns by Name

```
df.drop(columns=, inplace=True)
```

### Method 2: Drop Columns in Range by Name

```
df.drop(columns=df.loc, inplace=True)
```

### Method 3: Drop Multiple Columns by Index

```
df.drop(columns=df.columns], inplace=True)
```

### Method 4: Drop Columns in Range by Index

```
df.drop(columns=df.columns, inplace=True)
```

**Note:** The argument `inplace=True` tells pandas to drop the columns in place without reassigning the DataFrame.

The following examples show how to use each method in practice with the following pandas DataFrame:

```
import pandas as pd
```

```
#create DataFrame
```

```
df = pd.DataFrame({'team': ,  
'points': ,  
'assists': ,  
'rebounds': ,  
'steals': })
```

```
#view DataFrame
```

```
print(df)
```

```
team points assists rebounds steals
```

```
0 A 18 5 11 4
```

```
1 B 22 7 8 5
```

```
2 C 19 7 10 10
```

3 D 14 9 6 12

4 E 14 12 6 4

5 F 11 9 5 8

6 G 20 9 9 7

7 H 28 4 12 2

### Example 1: Drop Multiple Columns by Name

The following code shows how to drop the points, rebounds, and steals columns by name:

```
#drop multiple columns by name  
df.drop(columns=, inplace=True)
```

```
#view updated Dataframe  
print(df)
```

```
team assists
```

```
0 A 5
```

```
1 B 7
```

```
2 C 7
```

```
3 D 9
```

```
4 E 12
```

```
5 F 9
```

```
6 G 9
```

## 7 H 4

### Example 2: Drop Columns in Range by Name

The following code shows how to drop each column between the points and rebounds columns by name:

```
#drop columns in range by name  
df.drop(columns=df.loc, inplace=True)
```

```
#view updated Dataframe
```

```
print(df)
```

```
team steals
```

```
0 A 4
```

```
1 B 5
```

```
2 C 10
```

```
3 D 12
```

```
4 E 4
```

```
5 F 8
```

```
6 G 7
```

```
7 H 2
```

### Example 3: Drop Multiple Columns by Index

The following code shows how to drop the columns in

**index positions 0, 3 and 4 from the DataFrame:**

**#drop multiple columns by index**

**df.drop(columns=df.columns, inplace=True)**

**#view updated Dataframe**

**print(df)**

**points assists**

**0 18 5**

**1 22 7**

**2 19 7**

**3 14 9**

**4 14 12**

**5 11 9**

**6 20 9**

**7 28 4**

**Example 4: Drop Columns in Range by Index**

**The following code shows how to drop the columns in index positions 0, 3 and 4 from the DataFrame:**

**#drop columns by index range**

**df.drop(columns=df.columns, inplace=True)**

```
#view updated Dataframe  
print(df)
```

```
team steals
```

```
0 A 4
```

```
1 B 5
```

```
2 C 10
```

```
3 D 12
```

```
4 E 4
```

```
5 F 8
```

```
6 G 7
```

```
7 H 2
```

Note that the syntax `df.columns` specifies columns in index positions 1 *up to* 4.

Thus, this syntax drops the columns in index positions 1, 2 and 3.

Note: You can find the complete documentation for the pandas `drop()` function .

The following tutorials explain how to perform other common tasks in pandas: