

How can I drop all columns in a Pandas dataframe except for specific ones?

Authored by
stats writer

June 27, 2024

RECOMMENDED CITATION

stats writer (2024). *How can I drop all columns in a Pandas dataframe except for specific ones?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=154666>

The process of dropping all columns in a Pandas dataframe except for specific ones involves using the "drop" function with the "columns" parameter. This allows for selecting and dropping specific columns from the dataframe while retaining the desired ones. By specifying the columns to be dropped, the dataframe can be effectively manipulated to only include the desired columns. This method is useful for data cleaning and organizing tasks, where only certain columns are relevant for analysis or further processing.

Pandas: Drop All Columns Except Specific Ones

You can use the following methods to drop all columns except specific ones from a pandas DataFrame:

Method 1: Use Double Brackets

```
df = df[
```

Method 2: Use .loc

```
df = df.loc[
```

Both methods drop all columns in the DataFrame except the columns called col2 and col6.

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

```
import pandas as pd
```

```
#create DataFrame with six columns
```

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

```
#view DataFrame
```

```
print(df)
```

```
team points assists rebounds steals blocks
```

```
0 A 18 5 11 4 1
```

```
1 B 22 7 8 3 0
```

```
2 C 19 7 10 3 0
```

```
3 D 14 9 6 2 3
```

```
4 E 14 12 6 5 2
```

```
5 F 11 9 5 4 2
```

```
6 G 20 9 9 3 1
```

```
7 H 28 4 12 8 5
```

Example 1: Drop All Columns Except Specific Ones Using Double Brackets

We can use the following syntax to drop all columns in

the DataFrame except the ones called points and blocks:

```
#drop all columns except points and blocks
```

```
df = df]
```

```
#view updated DataFrame
```

```
print(df)
```

```
points blocks
```

```
0 18 1
```

```
1 22 0
```

```
2 19 0
```

```
3 14 3
```

```
4 14 2
```

```
5 11 2
```

```
6 20 1
```

```
7 28 5
```

Notice that only the points and blocks columns remain.

All other columns have been dropped.

Example 2: Drop All Columns Except Specific Ones Using .loc

We can also use the .loc function to drop all columns in

the DataFrame except the ones called points and blocks:

```
#drop all columns except points and blocks
```

```
df = df.loc[
```

```
#view updated DataFrame
```

```
print(df)
```

```
points blocks
```

```
0 18 1
```

```
1 22 0
```

```
2 19 0
```

```
3 14 3
```

```
4 14 2
```

```
5 11 2
```

```
6 20 1
```

```
7 28 5
```

Notice that only the points and blocks columns remain.

Related:

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