

How can I append a list to a Pandas DataFrame? Can you provide an example?

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Appending a list to a Pandas DataFrame is a method used to add new rows of data to an existing DataFrame. This allows for the expansion of the dataset and the addition of new information. An example of this process is as follows: First, create a list with the desired data. Then, use the `append()` method to add the list as a new row to the existing DataFrame. This will result in the original DataFrame being extended with the new data.

Append a List to a Pandas DataFrame (With Example)

You can use the following basic syntax to append a list to a pandas DataFrame:

```
#define list  
new_list =
```

```
#append list to DataFrame  
df.loc = new_list
```

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

Example: Append List to Pandas DataFrame

Suppose we have the following pandas DataFrame that contains information about various basketball teams:

```
import pandas as pd
```

```
#create DataFrame
```

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

```
#view DataFrame
```

```
df
```

```
team points assists rebounds
```

```
0 A 18 5 11
```

```
1 B 22 7 8
```

```
2 C 19 7 10
```

```
3 D 14 9 6
```

```
4 E 14 12 6
```

```
5 F 11 9 5
```

```
6 G 20 9 9
```

```
7 H 28 4 12
```

```
8 I 22 8 9
```

We can use the following code to append a list that contains information about a new basketball team to the end of the DataFrame:

```
#define list of values
```

```
new_team =
```

```
#append list to DataFrame
```

```
df.loc = new_team
```

```
#view updated DataFrame
```

```
df
```

```
team points assists rebounds
```

```
0 A 18 5 11
```

```
1 B 22 7 8
```

```
2 C 19 7 10
```

```
3 D 14 9 6
```

```
4 E 14 12 6
```

```
5 F 11 9 5
```

```
6 G 20 9 9
```

```
7 H 28 4 12
```

```
8 I 22 8 9
```

```
9 J 30 10 12
```

Notice that the list of values has been appended as a new row to the end of the DataFrame.

Note that you'll receive an error if the number of values in the list does not match the number of columns in the

existing DataFrame.

For example, suppose we attempt to append the following list to the end of the DataFrame:

```
#define list of values  
new_team =  
  
#append list to DataFrame  
df.loc = new_team  
  
#view updated DataFrame  
df
```

ValueError: cannot set a row with mismatched columns

We receive an error because our list contains two values, but the existing pandas DataFrame contains four columns.

To append a list to the end of this DataFrame, the list must also contain four values.

Additional Resources

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