How to Fix “ValueError: Index contains duplicate entries, cannot reshape

Authored by

stats writer

December 2, 2025

This is an error message that occurs when a user tries to reshape an array or dataframe that contains duplicate entries in the index. The reshaping can't be completed in this case, as duplicate entries will create confusion when attempting to re-organize the data. To fix this error, the user should check the data and remove any duplicate entries before attempting to reshape the array or dataframe.

One error you may encounter when using pandas is:

ValueError: Index contains duplicate entries, cannot reshape

This error usually occurs when you attempt to reshape a pandas DataFrames by using the **pivot()** function, but there are multiple values in the resulting DataFrame that share the same index values.

The following example shows how to fix this error in practice.

How to Reproduce the Error

Suppose we have the following pandas DataFrame:

import pandas as pd

#create DataFrame
df = pd.DataFrame({'team': ,
'position': ,
'points': })

#view DataFrame
df

team position points
0 A G 5
1 A G 7
2 A F 7
3 A F 9
4 B G 4
5 B G 9
6 B F 9
7 B F 12

Now suppose we attempt to pivot the DataFrame, using **team** as the rows and **position** as the columns:

#attempt to reshape DataFrame
df.pivot(index='team', columns='position', values='points')

ValueError: Index contains duplicate entries, cannot reshape

We receive an error because there are multiple rows in the DataFrame that share the same values for **team** and **position**.

Thus, when we attempt to reshape the DataFrame, pandas doesn't know which **points** value to display in each cell in the resulting DataFrame.

How to Fix the Error

To fix this error, we can use the **pivot_table()** function with a specific **aggfunc** argument to aggregate the data values in a certain way.

For example, we can use **pivot_table()** to create a new DataFrame that uses **team** as the rows, **position** as the columns, and the sum of the **points** values in the cells of the DataFrame:

df.pivot_table(index='team', columns='position', values='points', aggfunc='sum')

position F G
team
A 16 12
B 21 13

Notice that we don't receive an error this time.

The values in the DataFrame show the sum of **points** for each combination of **team** and **position**.

df.pivot_table(index='team', columns='position', values='points', aggfunc='mean')

position F G
team
A 8.0 6.0
B 10.5 6.5

By using the **aggfunc** argument within the **pivot_table()** function, we're able to avoid any errors.

Note: You can find the complete documentation for the **pivot_table()** function .

The following tutorials explain how to fix other common errors in Python: