**Adding names for readability**

You are now going to practice melting DataFrames. A DataFrame called visitors\_by\_city\_weekday has been pre-loaded for you. Explore it in the IPython Shell and see that it is the users DataFrame from previous exercises with the rows indexed by 'weekday', columns indexed by 'city', and values populated with 'visitors'.

Recall from the video that the goal of melting is to restore a pivoted DataFrame to its original form, or to change it from a wide shape to a long shape. You can explicitly specify the columns that should remain in the reshaped DataFrame with id\_vars, and list which columns to convert into values with value\_vars. As Dhavide demonstrated, if you don't pass a name to the values in pd.melt(), you will lose the name of your variable. You can fix this by using the value\_name keyword argument.

Your job in this exercise is to melt visitors\_by\_city\_weekday to move the city names from the column labels to values in a single column called 'city'. If you were to use just pd.melt(visitors\_by\_city\_weekday), you would obtain the following result:

city value

0 weekday Mon

1 weekday Sun

2 Austin 326

3 Austin 139

4 Dallas 456

5 Dallas 237

Therefore, you have to specify the id\_vars keyword argument to ensure that 'weekday' is retained in the reshaped DataFrame, and the value\_name keyword argument to change the name of value to visitors.

**INSTRUCTIONS**

* Reset the index of visitors\_by\_city\_weekday with .reset\_index().
* Print visitors\_by\_city\_weekday and verify that you have just a range index, 0, 1, 2, 3. This has been done for you.
* Melt visitors\_by\_city\_weekday to move the city names from the column labels to values in a single column called city.
* Print visitors to check that the city values are in a single column now and that the dataframe is longer and skinnier.

# Reset the index: visitors\_by\_city\_weekday

visitors\_by\_city\_weekday = visitors\_by\_city\_weekday.reset\_index()

# Print visitors\_by\_city\_weekday

print(visitors\_by\_city\_weekday)

# Melt visitors\_by\_city\_weekday: visitors

visitors = pd.melt(visitors\_by\_city\_weekday, id\_vars=['weekday'], value\_name='visitors')

# Print visitors

print(visitors)