Exercises: Pandas

WE'LL COVER THE FOLLOWING

Time to Test Your Skills!

Note: We are going to create a DataFrame called *“df”* in the first exercise, and we will keep referring to the same DataFrame as our input in the rest of the exercises.

Q1. Create a DataFrame from the given dictionary data and index labels and store it in the variable called “df”.

```
import pandas as pd

# Input
data = {'Artist': ['Ariana Grande', 'Taylor Swift', 'Ed Sheeran', 'Justin Bieber', 'Lady Gaga
        'Genre': ['Jazz', 'Rock', 'Jazz', 'Pop', 'Pop', 'Rock'],
        'Listeners': [1300000, 2700000, 5000000, 2000000, 3000000, 1100000]}
```

```
labels = ['AG', 'TS', 'ED', 'JB', 'LG', 'BM']


# Your solution goes here

# Uncomment the print statement once done
# print(df)
```

Q2. a) Select the column labelled “Listeners” and store it in the variable called “col”.
b) Select the first row and store it in the variable called “row”.

(Remember, we are still using the DataFrame called *df*.)

```
# Your solution goes here


# Uncomment the print statement once done
# print("Row:", row)
# print("Col:", col)
```

Q3. Select all the rows where the Genre is ‘Pop’ and store the result in the variable “pop_artists”.

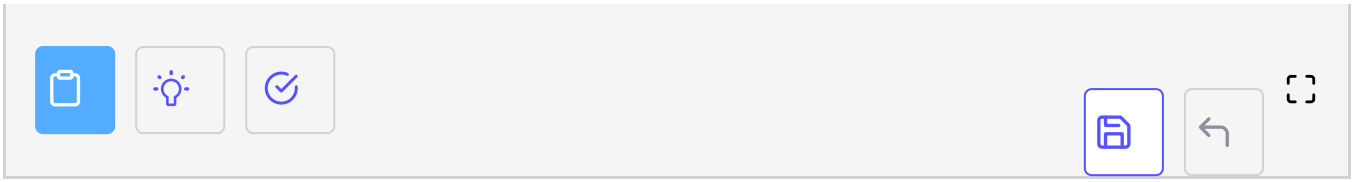
```
# Your solution goes here

# Uncomment the print statement once done
# print(pop_artists)
```

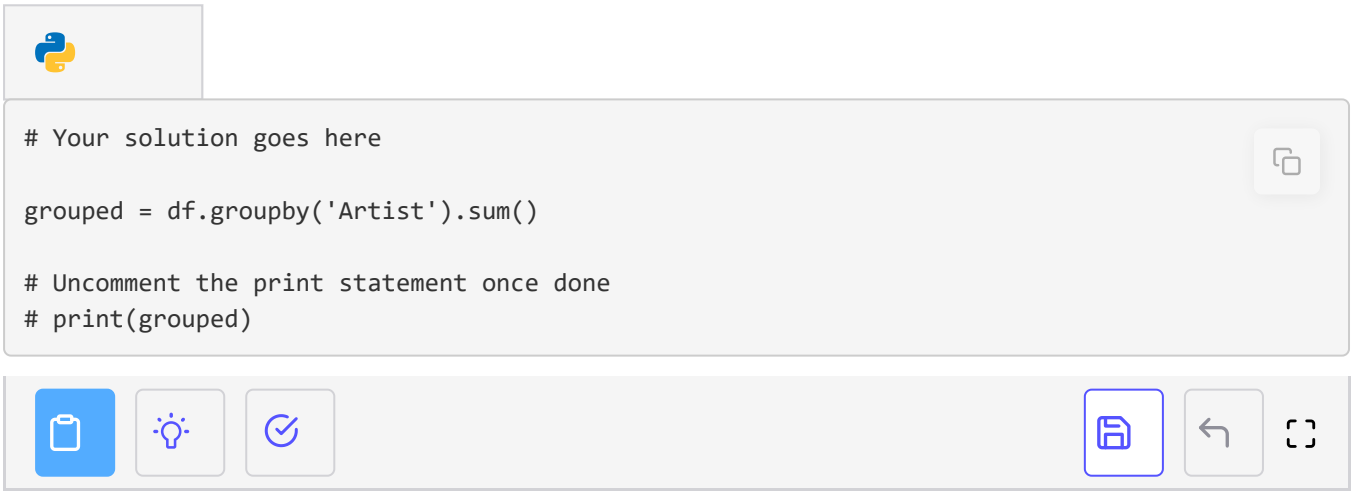
Q4. Select the artists who have more than 2,000,000 listeners and whose Genre is ‘Pop’ and save the output in the variable called “top_pop”.

```
# Your solution goes here

# Uncomment the print statement once done
# print(top_pop)
```



Q5. Perform a grouping by Genre using sum() as the aggregation function and store the results in the variable called “grouped”.



```
# Your solution goes here

grouped = df.groupby('Artist').sum()

# Uncomment the print statement once done
# print(grouped)
```