

Calculating Mean Price by Destination

Question and Screenshot:

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Daily XP 1447

Exercise

Adding descriptive statistics

Now "Duration" and "Price" both contain numeric values in the planes DataFrame, you would like to calculate summary statistics for them that are conditional on values in other columns.

Instructions 3/3 30 XP

✓ Add a column to planes containing the standard deviation of "Price" based on "Airline".

✓ Calculate the median for "Duration" by "Airline", storing it as a column called "airline_median_duration".

3 Find the mean "Price" by "Destination", saving it as a column called "price_destination_mean".

Take Hint (-9 XP)

script.py

Light Mode

```
1 # Mean Price by Destination
2 planes["price_destination_mean"] = planes.groupby
  ("Destination")["Price"]._____()._____()
3
4 print(planes[["Destination", "price_destination_mean"]].
  value_counts())
```

↺ Run Code Submit Answer

IPython Shell

Slides

<script.py> output:

Airline	airline_median_duration	
Jet Airways	13.333	3685
IndiGo	2.917	1981
Air India	15.917	1686
Multiple carriers	10.250	1148
SpiceJet	2.500	787
Vistara	3.167	455
Air Asia	2.833	309
GoAir	5.167	182

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In [1]:

Question Explanation:

This task involves calculating the mean price of flights grouped by their destination in the planes DataFrame. The result is stored in a new column called 'price_destination_mean', and the frequency of unique values is displayed.

Code Solution:

```
# Mean Price by Destination
planes["price_destination_mean"] = planes.groupby("Destination")
["Price"].transform("mean")

# Display the frequency of unique values in the new column
print(planes[["Destination", "price_destination_mean"]].value_counts())
```

Solution Explanation:

1. The ``groupby('Destination')`` method groups the DataFrame by the 'Destination' column.
2. The ``transform('mean')`` calculates the mean price of flights for each group.
3. The calculated mean values are stored in a new column called 'price_destination_mean', and the ``value_counts()`` method displays the frequency of unique destination and mean price combinations.