

Pivoting on One Variable - Instruction 3

The screenshot shows a web browser window with a DataCamp course page. The page title is 'Pivoting on one variable | Python'. The URL is 'campus.datacamp.com/courses/data-manipulation-with-pandas/aggregating-dataframes?ex=14'. The page content includes an 'Exercise' section with instructions and a code editor.

Exercise

Pivoting on one variable

Pivot tables are the standard way of aggregating data in spreadsheets.

In pandas, pivot tables are essentially another way of performing grouped calculations. That is, the `.pivot_table()` method is an alternative to `.groupby()`.

In this exercise, you'll perform calculations using `.pivot_table()` to replicate the calculations you performed in the last lesson using `.groupby()`.

`sales` is available and `pandas` is imported as `pd`.

Instructions 3/3 30 XP

- ✓ Get the mean `weekly_sales` by `type` using `.pivot_table()` and store as `mean_sales_by_type`.
- ✓ Get the mean and median (using NumPy functions) of `weekly_sales` by `type` using `.pivot_table()` and store as `mean_med_sales_by_type`.
- ⚠ Get the mean of `weekly_sales` by `type` and `is_holiday` using `.pivot_table()` and store as `mean_sales_by_type_holiday`.

[Take Hint \(-8 XP\)](#)

```
1 # Pivot for mean weekly_sales by store type and holiday
2 mean_sales_by_type_holiday = sales.pivot_table(____)
3
4 # Print mean_sales_by_type_holiday
5 print(mean_sales_by_type_holiday)
```

Python Shell Slides

`<script.py> output:`

| | mean | median |
|------|--------------|--------------|
| type | weekly_sales | weekly_sales |
| A | 23674.667 | 11943.92 |
| B | 25696.678 | 13356.08 |

In [1]:

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In this exercise, you'll perform calculations using `.pivot_table()` to replicate the calculations you performed in the last lesson using `.groupby()`.

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Final Answer - Instruction 3

```
# Pivot for mean weekly_sales by store type and holiday
mean_sales_by_type_holiday = sales.pivot_table(values="weekly_sales",
index="type", columns="is_holiday")
```

```
# Print mean_sales_by_type_holiday
print(mean_sales_by_type_holiday)
```