

## Pivoting on One Variable - Instruction 2

The screenshot shows a web browser window with multiple tabs. The active tab is titled 'Pivoting on one variable | Pyth...'. The browser address bar shows the URL: [campus.datacamp.com/courses/data-manipulation-with-pandas/aggregating-dataframes?ex=14](https://campus.datacamp.com/courses/data-manipulation-with-pandas/aggregating-dataframes?ex=14). Below the browser window, there is a notification bar stating: 'You are using an unsupported command-line flag: --unsafely-treat-insecure-origin-as-secure=http://54.173.176.93:4444. Stability and security will suffer.'

The main content area is titled 'Learn / Courses / Data Manipulation with pandas'. It features a sidebar with 'Exercise' and 'Course Outline' tabs. The 'Exercise' tab is active, showing the title 'Pivoting on one variable' and a description: '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.'

Below the description, there are three instructions:

- 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.

Each instruction has a 'Take Hint (-10 XP)' button. To the right of the instructions is a code editor with the following Python code:

```
1 # Import NumPy as np
2 import numpy as np
3
4 # Pivot for mean and median weekly_sales for each store type
5 mean_med_sales_by_type = sales.pivot_table(____)
6
7 # Print mean_med_sales_by_type
8 print(mean_med_sales_by_type)
```

Below the code editor is a 'Jupyter Shell' window showing the prompt 'In [1]:'.

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`.

## Final Answer - Instruction 2

```
# Import NumPy as np
import numpy as np
```

```
# Pivot for mean and median weekly_sales for each store type
mean_med_sales_by_type = sales.pivot_table(values="weekly_sales",
index="type", aggfunc=[np.mean, np.median])
```

```
# Print mean_med_sales_by_type
print(mean_med_sales_by_type)
```