

Pivoting on One Variable - Instruction 2

The screenshot shows a web browser window with a DataCamp exercise titled "Pivoting on one variable". The exercise is part of a course "Data Manipulation with pandas". The instructions are as follows:

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

The exercise is worth 35 XP. A "Take Hint (-10 XP)" button is available for the second instruction. On the right, a code editor shows 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 "Python Shell" area with "In [1]:" and a "Run Code" button. The bottom of the screen shows a Windows taskbar with various icons and the system clock at 15:33 on 25/11/2024.

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)
```