

Sorting by Index Values

The screenshot shows a web browser window with a DataCamp course page. The page title is 'Sorting by index values | Python'. The URL is 'campus.datacamp.com/courses/data-manipulation-with-pandas/slicing-and-indexing-dataframes?ex=5'. The page content includes an 'Exercise' section with the title 'Sorting by index values'. Below the title, there is a paragraph explaining that previously, the order of rows in a DataFrame was changed by calling `.sort_values()`, and it's also useful to be able to sort by elements in the index. For this, you need to use `.sort_index()`. Below this paragraph, there is a section titled 'Instructions' with a '100 XP' badge. The instructions list three tasks: 1. Sort `temperatures_ind` by the index values. 2. Sort `temperatures_ind` by the index values at the "city" level. 3. Sort `temperatures_ind` by ascending country then descending city. Below the instructions, there is a 'Take Hint (-30 XP)' button. To the right of the instructions, there is a code editor window titled 'script.py' with a 'Light Mode' toggle. The code editor contains the following Python code:

```
1 # Sort temperatures_ind by index values
2 print(____)
3
4 # Sort temperatures_ind by index values at the city level
5 print(____)
6
7 # Sort temperatures_ind by country then descending city
8 print(____)
```

 Below the code editor, there is an 'IPython Shell' window with a 'Slides' tab. The IPython Shell shows 'In [1]:'. At the bottom of the browser window, there is a taskbar with various icons and a system clock showing '16:59 25/11/2024'.

Previously, you changed the order of the rows in a DataFrame by calling `.sort_values()`. It's also useful to be able to sort by elements in the index. For this, you need to use `.sort_index()`.

pandas is loaded as `pd`. `temperatures_ind` has a multi-level index of country and city, and is available.

Final Answer

```
# Sort temperatures_ind by index values
print(temperatures_ind.sort_index())
```

```
# Sort temperatures_ind by index values at the city level
print(temperatures_ind.sort_index(level="city"))
```

```
# Sort temperatures_ind by ascending country then descending city
print(temperatures_ind.sort_index(level=["country", "city"],
ascending=[True, False]))
```