

Square Brackets (2)

The screenshot shows a web browser with multiple tabs. The active tab is 'campus.datacamp.com/courses/intermediate-python/dictionaries-pandas/ex=16'. The page is titled 'Learn / Courses / Intermediate Python'. The exercise is 'Square Brackets (2)'. The instructions state: 'Square brackets can do more than just selecting columns. You can also use them to get rows, or observations, from a DataFrame. The following call selects the first five rows from the cars DataFrame: cars[0:5]'. It also notes: 'The result is another DataFrame containing only the rows you specified. Pay attention: You can only select rows using square brackets if you specify a slice, like 0:5. Also, you're using the integer indexes of the rows here, not the row labels!'. The instructions list two tasks: 'Select the first 3 observations from cars and print them out.' and 'Select the fourth, fifth and sixth observation, corresponding to row indexes 3, 4 and 5, and print them out.' There is a 'Take Hint (-30 XP)' button. The code editor shows the following code:

```
1 # Import cars data
2 import pandas as pd
3 cars = pd.read_csv('cars.csv', index_col = 0)
4
5 # Print out first 3 observations
6
7
8 # Print out fourth, fifth and sixth observation
9
```

 The Python Shell shows 'In [1]:'. The bottom of the browser shows the Windows taskbar with the date '20/11/2024' and time '14:39'.

Instructions:

1. Select the first 3 observations from cars and print them out.
2. Select the fourth, fifth, and sixth observations, corresponding to row indexes 3, 4, and 5, and print them out.

Code and Explanation:

```
# Import cars data
import pandas as pd
cars = pd.read_csv('cars.csv', index_col=0)
```

```
# Print out first 3 observations
print(cars[0:3])
```

```
# Print out fourth, fifth, and sixth observation
print(cars[3:6])
```

Explanation of the Code:

1. The 'cars.csv' file is read into a Pandas DataFrame using `pd.read_csv` with `index_col=0` to set the first column as the index.
2. The slicing `'cars[0:3]'` selects the first 3 rows (index positions 0, 1, and 2).
3. The slicing `'cars[3:6]'` selects the rows with index positions 3, 4, and 5.