

loc and iloc

The screenshot shows a web browser window with the URL `campus.datacamp.com/courses/intermediate-python/dictionaries-pandas/ex=17`. The page is titled "loc and iloc ()" and is part of an "Exercise" section. It explains that `loc` is label-based and `iloc` is integer index-based. It provides example code for selecting data from a `cars` DataFrame. The instructions section lists two tasks: selecting the observation for Japan as a Series and selecting observations for Australia and Egypt as a DataFrame. A Python Shell interface is visible on the right, showing the code being executed.

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

Question:

Use `loc` or `iloc` to select the observation corresponding to Japan as a Series. The label of this row is `JPN`, the index is 2. Make sure to print the resulting Series.

Use `loc` or `iloc` to select the observations for Australia and Egypt as a DataFrame. You can find out about the labels/Indexes of these rows by inspecting `cars`. Make sure to print the resulting DataFrame.

Answer:

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

```
# Print out observation for Japan
print(cars.loc['JPN'])
```

```
# Print out observations for Australia and Egypt
```

```
print(cars.loc[['AUS', 'EG']])
```

Code Explanation:

1. ``import pandas as pd``: Imports the pandas library, which is essential for data manipulation and analysis.
2. ``cars = pd.read_csv('cars.csv', index_col=0)``: Reads the 'cars.csv' file into a pandas DataFrame and sets the first column as the index.
3. ``print(cars.loc['JPN'])``: Uses the ``loc`` method to access the row labeled 'JPN' in the DataFrame, which corresponds to Japan, and prints it as a Series.
4. ``print(cars.loc[['AUS', 'EG']])``: Uses the ``loc`` method to access rows labeled 'AUS' (Australia) and 'EG' (Egypt) as a DataFrame and prints them.