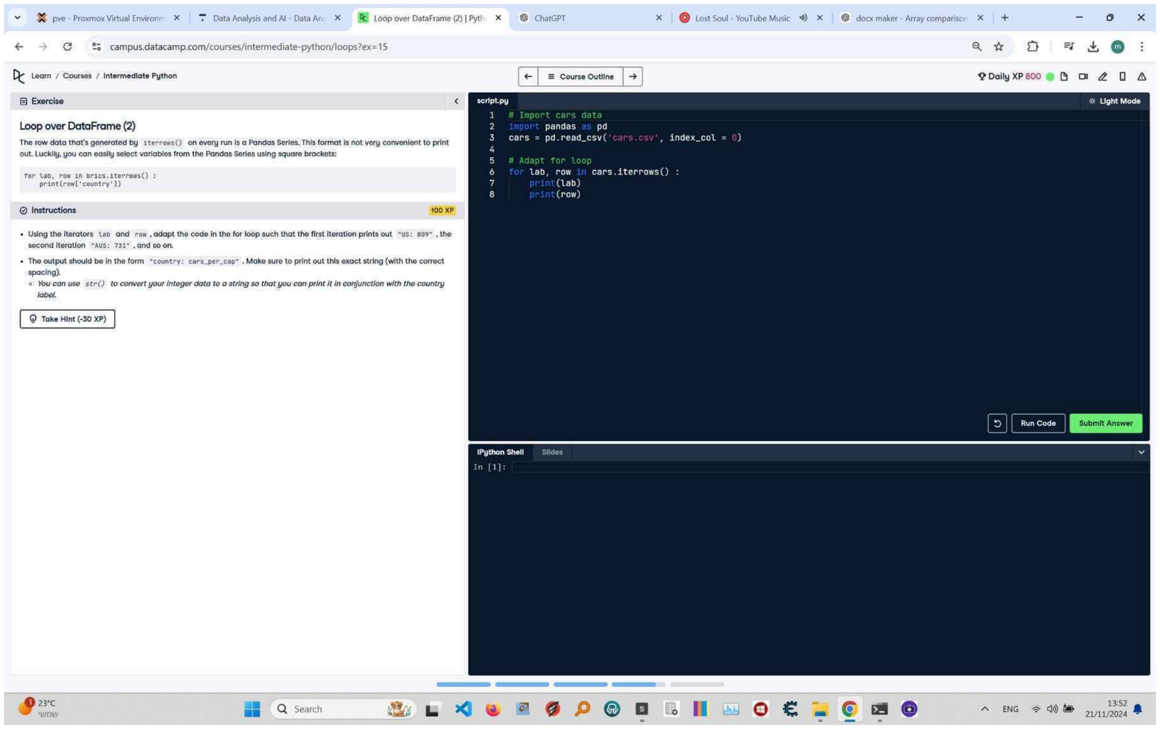
Loop Over DataFrame (2) in Python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Loop over DataFrame (2)

The row data that's generated by `iterrows()` on every run is a Pandas Series. This format is not very convenient to print out. Luckily, you can easily select variables from the Pandas Series using square brackets:

```
for lab, row in brics.iterrows() :
    print(row['country'])
```

Instructions 100 XP

- Using the iterators `lab` and `row`, adapt the code in the for loop such that the first iteration prints out `"US: 809"`, the second iteration `"AUS: 731"`, and so on.
- The output should be in the form `"country: cars_per_cap"`. Make sure to print out this exact string (with the correct spacing).
    - *You can use `str()` to convert your integer data to a string so that you can print it in conjunction with the country label.*

script.py

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

# Adapt for loop
for lab, row in cars.iterrows() :
    print(lab)
    print(row)
```

```
In [1]:
```

Question:

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for lab, row in brics.iterrows():
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Instructions:
Using the iterators \`lab\` and \`row\`, adapt the code in the for loop such that the first iteration prints out:
\`US: 809\`, the second iteration \`AUS: 731\`, and so on.

The output should be in the form \`country: cars_per_cap\`. Make sure to print out this exact string (with the correct spacing).

- You can use \`str()\` to convert your integer data to a string so that you can print it in conjunction with the country label.

Answer:

Here is the Python code that solves the problem:

```
# Import pandas
import pandas as pd

# Load the cars DataFrame
cars = pd.read_csv('cars.csv', index_col=0)

# Iterate over rows of cars
for lab, row in cars.iterrows():
    print(f"{lab}: {row['cars_per_cap']}")
```

Explanation:

1. **Importing pandas**: The `pandas` library is imported to handle the DataFrame.
2. **Loading the DataFrame**: The `cars` DataFrame is loaded from a CSV file (`cars.csv`) with the first column set as the index using `index_col=0`.
3. **Iterating over rows**: The `iterrows()` method is used to iterate over the rows of the DataFrame. On each iteration:
   - `lab` contains the row label (country code).
   - `row` contains the contents of the row as a Series.
4. **Printing formatted output**: The `print()` function uses an f-string to format the output as `country: cars_per_cap`, where `country` is the row label and `cars_per_cap` is the value from the column `cars_per_cap`. The integer value is converted to a string implicitly within the f-string.