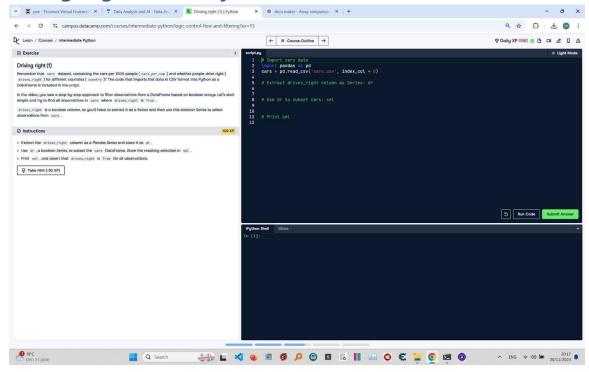
## **Driving Right (1) in Python**



\*\*Ouestion:\*\*

Remember that `cars` dataset contains the cars per 1000 people (`cars\_per\_cap`) and whether people drive right (`drives\_right`) for different countries (`country`). The code that imports this data in CSV format into Python as a DataFrame is included in the script.

- 1. Extract the 'drives right' column as a Pandas Series and store it as 'dr'.
- 2. Use `dr`, a boolean Series, to subset the `cars` DataFrame. Store the resulting selection in `sel`.
- 3. Print `sel`, and assert that `drives right` is `True` for all observations.

\*\*Answer:\*\*

Here is the Python code that solves the problem:

- # Import cars data import pandas as pd
- # Read the dataset
  cars = pd.read\_csv('cars.csv', index\_col=0)
- # Extract drives\_right column as Series: dr

```
dr = cars['drives_right']
# Use dr to subset cars: sel
sel = cars[dr]
# Print sel
print(sel)
```

## \*\*Explanation:\*\*

- 1. \*\*Import Pandas\*\*: The Pandas library is imported to handle tabular data in a DataFrame.
- 2. \*\*Read the dataset\*\*: The `pd.read\_csv()` function reads the dataset from a CSV file into a Pandas DataFrame. The `index\_col=0` parameter sets the first column as the index.
- 3. \*\*Extract `drives\_right` column\*\*: The `drives\_right` column is extracted as a Pandas Series and stored in `dr`.
- 4. \*\*Subset the DataFrame\*\*: The `cars[dr]` expression uses the boolean Series `dr` to filter the rows of the DataFrame where `drives\_right` is `True`. The result is stored in `sel`.
- 5. \*\*Print the result\*\*: The `print(sel)` statement displays the subsetted DataFrame.