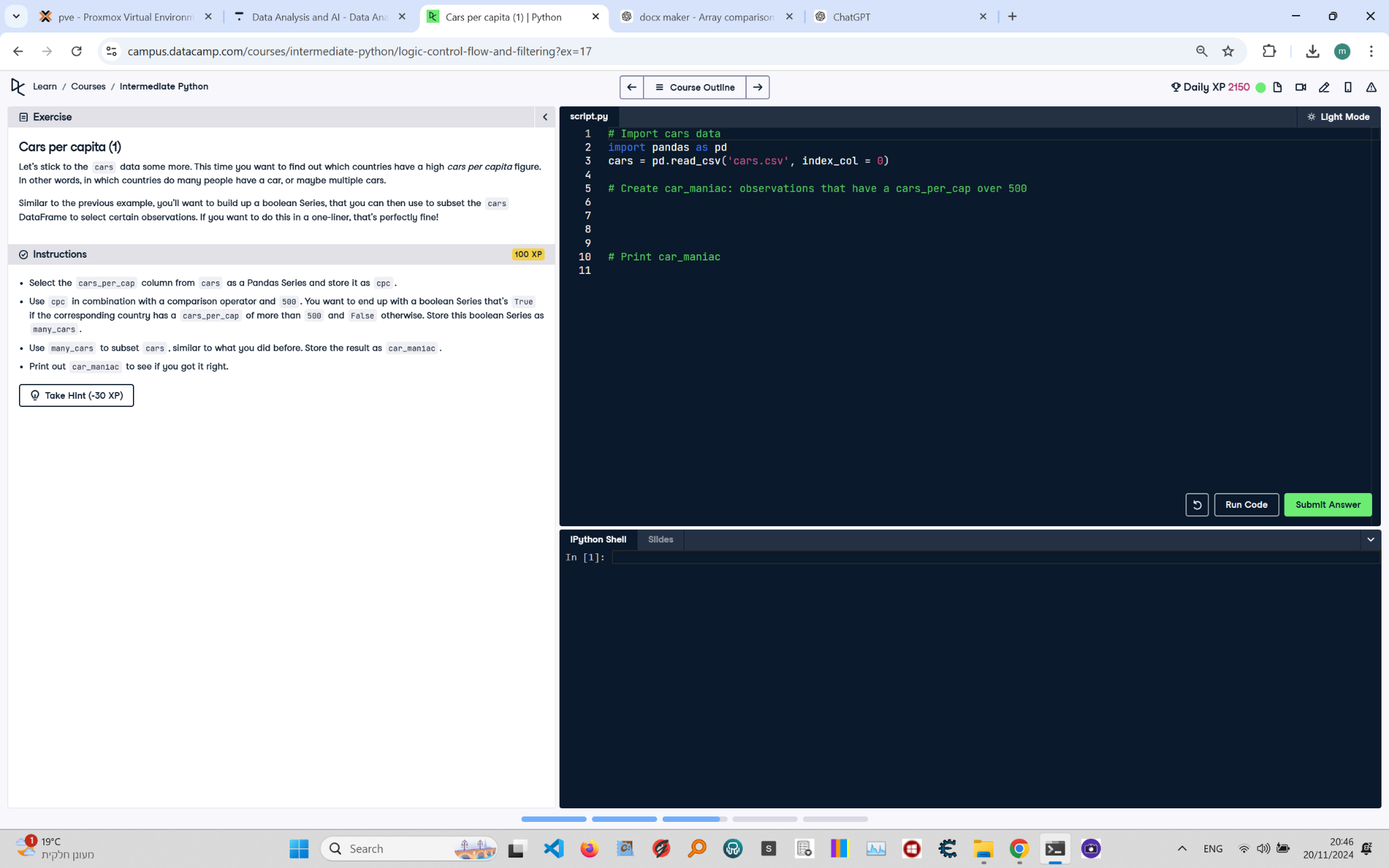
# Cars per Capita (1) in Python



\*\*Question:\*\*

Let's stick to the `cars` data some more. This time you want to find out which countries have a high `cars\_per\_cap` figure. In other words, in which countries do many people have a car, or maybe multiple cars.  
1. Select the `cars\_per\_cap` column from `cars` as a Pandas Series and store it as `cpc`.  
2. Use `cpc` in combination with a comparison operator and 500. You want to end up with a boolean Series that's `True` if the corresponding country has a `cars\_per\_cap` of more than 500 and `False` otherwise. Store this boolean Series as `many\_cars`.  
3. Use `many\_cars` to subset `cars`, similar to what you did before. Store the result as `car\_maniac`.  
4. Print out `car\_maniac` to see if you got it right.

\*\*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)  
  
# Select cars\_per\_cap column as Series: cpc  
cpc = cars['cars\_per\_cap']  
  
# Create many\_cars: boolean Series for cars\_per\_cap > 500  
many\_cars = cpc > 500  
  
# Use many\_cars to subset cars: car\_maniac  
car\_maniac = cars[many\_cars]  
  
# Print car\_maniac  
print(car\_maniac)

\*\*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 `cars\_per\_cap` column\*\*: The `cars\_per\_cap` column is extracted as a Pandas Series and stored in `cpc`.  
4. \*\*Create boolean Series\*\*: The `cpc > 500` comparison creates a boolean Series indicating which countries have a `cars\_per\_cap` greater than 500. This boolean Series is stored in `many\_cars`.  
5. \*\*Subset DataFrame\*\*: The `cars[many\_cars]` expression uses the boolean Series to filter the rows where `cars\_per\_cap` is greater than 500. The result is stored in `car\_maniac`.  
6. \*\*Print the result\*\*: The `print(car\_maniac)` statement displays the subsetted DataFrame.