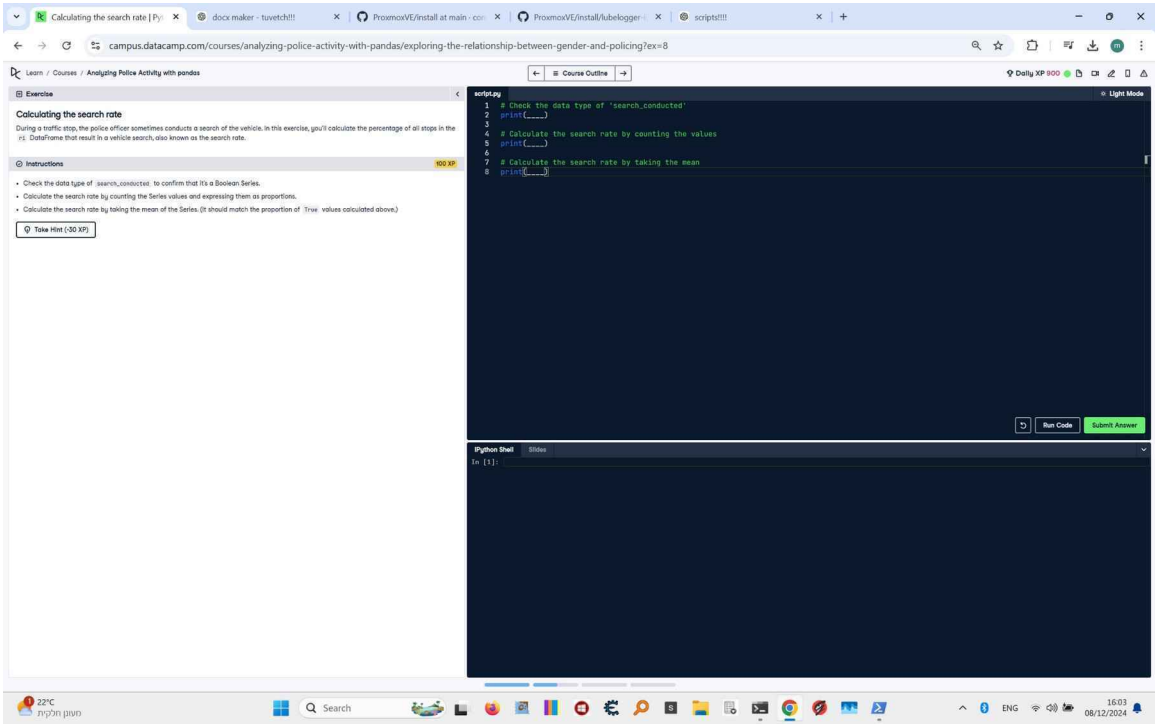
Calculating the Search Rate



Task Description

1. Check the data type of 'search_conducted' to confirm that it's a Boolean Series.
2. Calculate the search rate by counting the Series values and expressing them as proportions.
3. Calculate the search rate by taking the mean of the Series (it should match the proportion of True values calculated above).

Code Solution

```
# Check the data type of 'search_conducted'
print(ri['search_conducted'].dtype)

# Calculate the search rate by counting the values
print(ri['search_conducted'].value_counts(normalize=True))

# Calculate the search rate by taking the mean
print(ri['search_conducted'].mean())
```

Code Explanation

1. The line 'print(ri['search_conducted'].dtype)' confirms the data type of the 'search_conducted' column. It should be of Boolean type (True/False values) for proper calculations.

2. The line 'print(ri['search_conducted'].value_counts(normalize=True))' calculates the proportion of True and False values in the 'search_conducted' column. The normalize=True argument expresses the counts as proportions.
3. The line 'print(ri['search_conducted'].mean())' calculates the mean of the Boolean Series, which represents the proportion of True values (i.e., the search rate). This method provides the same result as the normalized value count.