

## Comparing Search Rates by Gender (Part 3)

campus.datacamp.com/courses/analyzing-police-activity-with-pandas/exploring-the-relationship-between-gender-and-policing?ex=9

Learn / Courses / Analyzing Police Activity with pandas

Exercise

### Comparing search rates by gender

In this exercise, you'll compare the rates at which female and male drivers are searched during a traffic stop. Remember that the vehicle search rate across all stops is about 5.8%.

First, you'll filter the DataFrame by gender and calculate the search rate for each group separately. Then, you'll perform the same calculation for both genders at once using a .str.strip().

Instructions 5/5

- Group by driver gender to calculate the search rate for both groups simultaneously. (It should match the previous results.)

Take Hint (4 XP)

script.py

```
1 # Calculate the search rate for both groups simultaneously
2 print(r1.groupby(____).search_conducted.____)
```

Python Shell

slides

```
>script.py> output:
0.0543357910246891
In [1]:
```

## Task Description

1. Group by driver gender to calculate the search rate for both groups simultaneously.
2. Verify that the result matches the previously calculated individual rates.

## Code Solution

```
# Calculate the search rate for both groups simultaneously
gender_search_rate = ri.groupby('driver_gender')
['search_conducted'].mean()
print(gender_search_rate)
```

## Code Explanation

1. The line `'gender_search_rate = ri.groupby('driver_gender')['search_conducted'].mean()'` groups the DataFrame by the `'driver_gender'` column and calculates the mean of `'search_conducted'` for each group. This provides the search rate for both male and female drivers in one step.
2. The line `'print(gender_search_rate)'` outputs the calculated search rates to verify that they match the previously calculated rates for each gender.