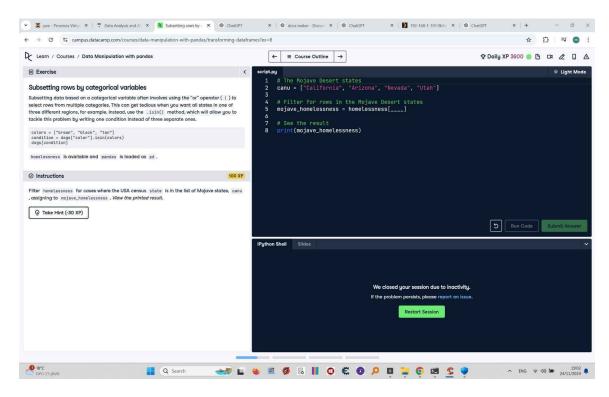
# **Subsetting Rows by Categorical Variables**

This document includes the question, the solution, and a breakdown of the code provided in the screenshot.

### **Uploaded Screenshot**

Below is the screenshot of the task:



### Question

Filter `homelessness` for cases where the USA census `state` is in the list of Mojave states, `canu`, assigning the result to `mojave\_homelessness`. View the printed result.

#### **Answer**

```
# The Mojave Desert states
canu = ["California", "Arizona", "Nevada", "Utah"]
```

# Filter for rows in the Mojave Desert states mojave\_homelessness = homelessness[homelessness["state"].isin(canu)]

```
# See the result
print(mojave homelessness)
```

## **Code Explanation**

# Explanation of the code:

- 1. `canu = ["California", "Arizona", "Nevada", "Utah"]`: Creates a list of Mojave states to be used for filtering.
- 2. `homelessness["state"].isin(canu)`: Checks if each value in the `state` column is present in the `canu` list, creating a boolean mask.
- 3. `homelessness[homelessness["state"].isin(canu)]`: Filters the `homelessness` DataFrame to include only rows where the mask is `True`.
- 4. `mojave homelessness`: Stores the filtered DataFrame for further use.
- 5. `print(mojave\_homelessness)`: Prints the resulting DataFrame to verify the filter.