

Dropping Columns

The screenshot shows a web browser window with the URL `campus.datacamp.com/courses/analyzing-police-activity-with-pandas/preparing-the-data-for-analysis/ex-3`. The page displays an exercise titled "Dropping columns" with instructions and a code editor. The code editor shows the following Python code:

```
1 # Examine the shape of the DataFrame
2 print(ri.shape)
3
4 # Drop the 'county_name' and 'state' columns
5 ri.drop(['county_name', 'state'], axis='columns', inplace=True)
6
7 # Examine the shape of the DataFrame (again)
8 print(ri.shape)
```

Below the code editor, the output of the code is shown in a terminal window:

```
state      0
stop_date  0
stop_time  0
county_name 91741
driver_gender  5200
driver_age    5200
citation_row    5200
citation      5200
search_conducted  0
search_type    81624
stop_outcome    5200
is_arrested    5200
stop_duration    5200
stop_related_stop  0
district        0
https://data
```

Task Description

1. Examine the DataFrame's shape to find out the number of rows and columns.
2. Drop both the 'county_name' and 'state' columns by passing the column names to the `.drop()` method as a list of strings.
3. Examine the shape again to verify that there are now two fewer columns.

Code Solution

```
# Examine the shape of the DataFrame
print(ri.shape)
```

```
# Drop the 'county_name' and 'state' columns
ri.drop(['county_name', 'state'], axis='columns', inplace=True)
```

```
# Examine the shape of the DataFrame (again)
print(ri.shape)
```

Code Explanation

1. The line `'print(ri.shape)'` prints the shape of the DataFrame. This outputs the number of rows and columns as a tuple (rows, columns).
2. The line `'ri.drop(['county_name', 'state'], axis='columns', inplace=True)'` drops the specified columns from the DataFrame. The `'axis'` parameter is set

to 'columns' to indicate column-wise operation, and 'inplace=True' makes the change directly to the DataFrame.

3. The line 'print(ri.shape)' is used again to confirm that the DataFrame now has two fewer columns, indicating the columns were successfully removed.