

# 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 is titled "Exercise" and "Dropping columns". It contains instructions and a code editor.

**Instructions:**

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

**Code Editor:**

```
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)
```

**Python Shell Output:**

```
state      0
stop_date  0
stop_time  0
county_name 91741
arrest_gender  5202
arrest_age  5202
citation_row  5202
citation  5202
search_conducted  0
search_type  81624
stop_outcome  5202
is_arrested  5202
stop_duration  5202
arrest_related_stop  0
arrest  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.