Rodriguez_Felipe_DSC640_Week_7-8_Python_Code

February 4, 2024

```python
[7]: import pandas as pd
```

```python
[8]: df = pd.read_csv('crimerates-by-state-2005.csv')
```

```python
[9]: df.head()
```

```
[9]:            state  murder  forcible_rape  robbery  aggravated_assault  \
     0  United States     5.6           31.7    140.7               291.1
     1        Alabama     8.2           34.3    141.4               247.8
     2         Alaska     4.8           81.1     80.9               465.1
     3        Arizona     7.5           33.8    144.4               327.4
     4       Arkansas     6.7           42.9     91.1               386.8

        burglary  larceny_theft  motor_vehicle_theft  population
     0     726.7         2286.3                416.7   295753151
     1     953.8         2650.0                288.3     4545049
     2     622.5         2599.1                391.0      669488
     3     948.4         2965.2                924.4     5974834
     4    1084.6         2711.2                262.1     2776221
```
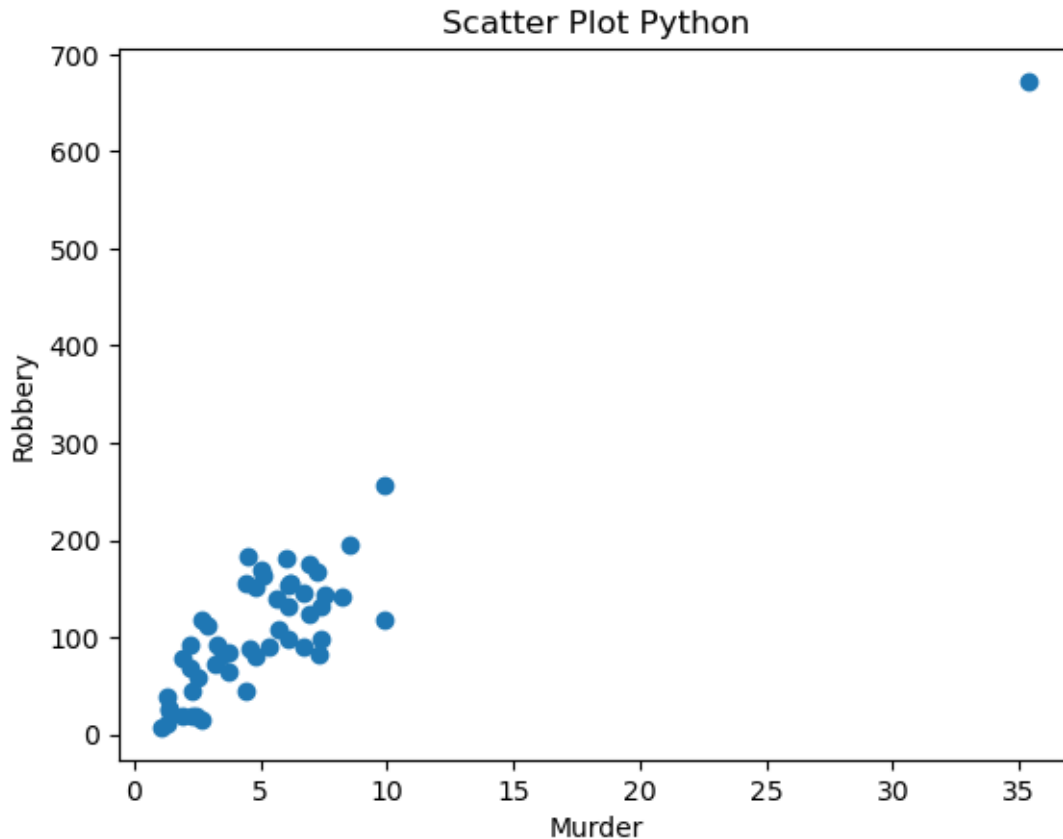
```python
[10]: import matplotlib.pyplot as plt
```

```python
[11]: plt.scatter(df['murder'], df['robbery'])
      plt.xlabel('Murder')
      plt.ylabel('Robbery')
      plt.title('Scatter Plot Python')
```
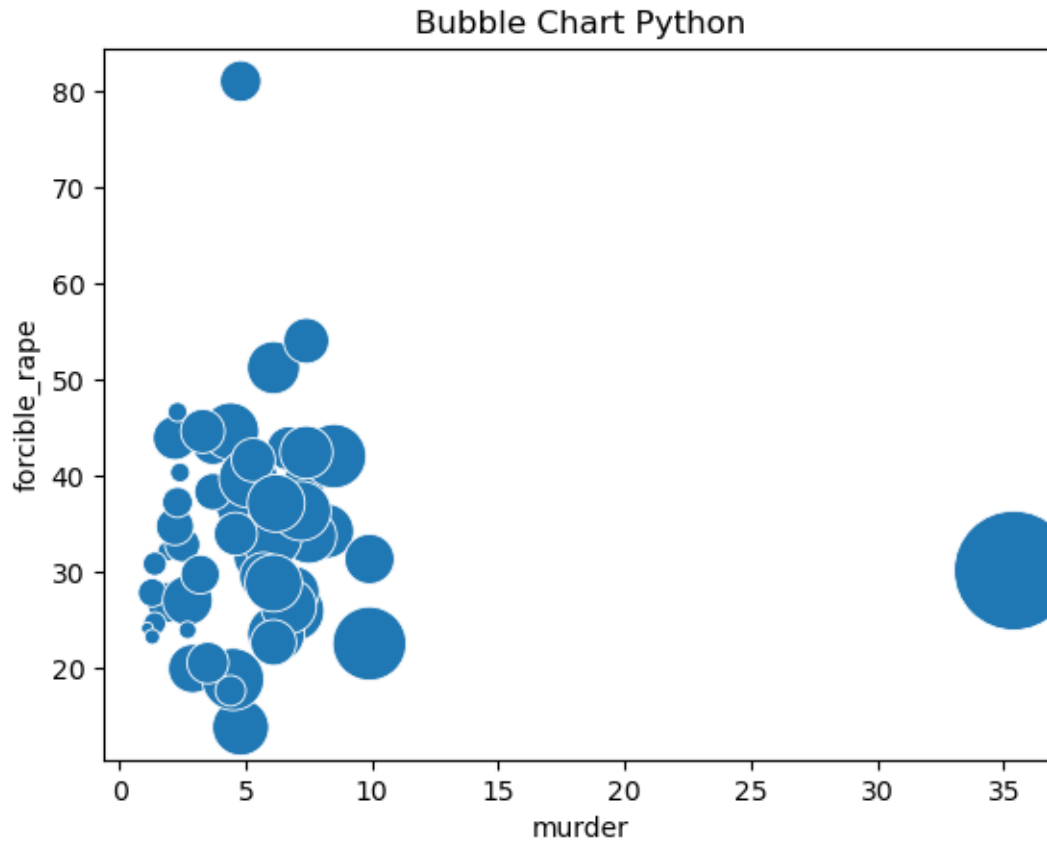
```
[11]: Text(0.5, 1.0, 'Scatter Plot Python')
```

Scatter Plot Python

```python
[12]: import seaborn as sns
```

```python
[13]: ax = sns.scatterplot(data=df, x="murder", y="forcible_rape", size="robbery",␣
      ↪legend=False, sizes=(20, 2000))
      ax.set(title='Bubble Chart Python')
      plt.show()
```

```
/Users/feliperodriguez/opt/anaconda3/lib/python3.9/site-
packages/seaborn/_core.py:1225: FutureWarning: is_categorical_dtype is
deprecated and will be removed in a future version. Use isinstance(dtype,
CategoricalDtype) instead
  if pd.api.types.is_categorical_dtype(vector):
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```

```
CategoricalDtype) instead
  if pd.api.types.is_categorical_dtype(vector):
```


[14]:
```
sns.distplot(a=df.robbery, kde=False)
plt.title('Density Plot Python')

plt.show()
```

/Users/feliperodriguez/opt/anaconda3/lib/python3.9/site-
packages/seaborn/distributions.py:2619: FutureWarning: `distplot` is a
deprecated function and will be removed in a future version. Please adapt your
code to use either `displot` (a figure-level function with similar flexibility)
or `histplot` (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)

Density Plot Python