

# DSO 545: Statistical Computing and Data Visualization

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## Lab 9: Data Visualization Using Matplotlib (Part3)

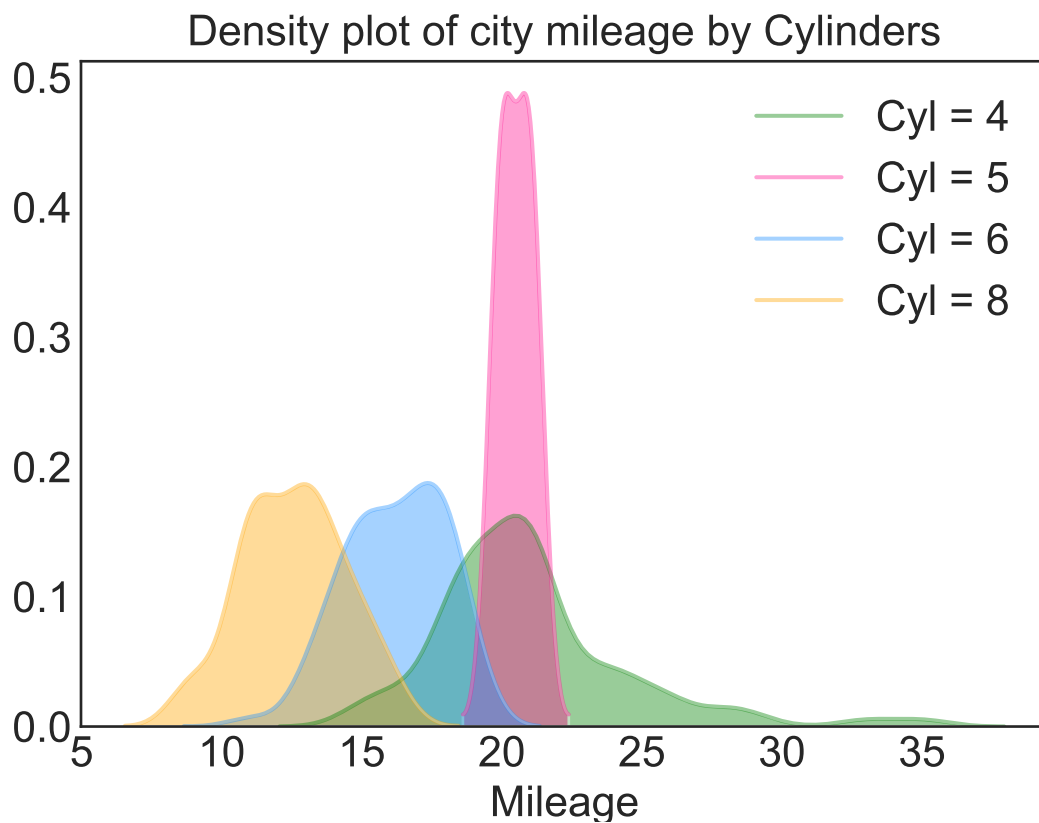
### Density Plots

1. Create the following density plot to describe how the distribution of city mileage varies with respect the number of cylinders.

```
## <matplotlib.axes._subplots.AxesSubplot object at 0x1234a5890>
```

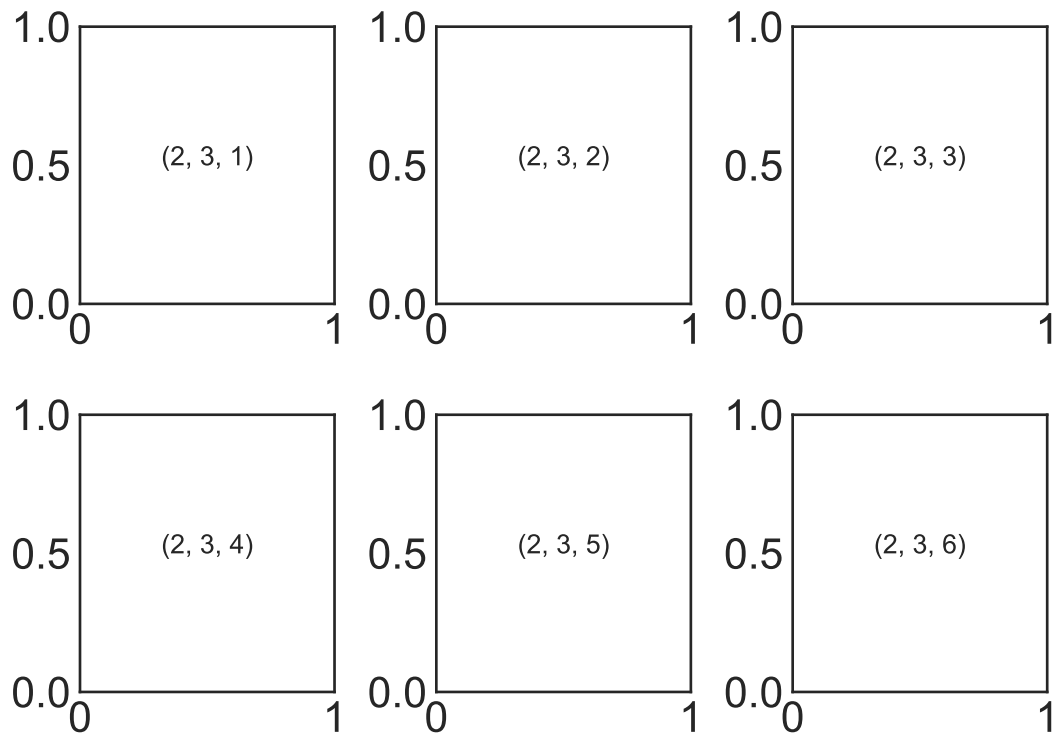
```
## <matplotlib.axes._subplots.AxesSubplot object at 0x1234a5890>
```

```
## <matplotlib.axes._subplots.AxesSubplot object at 0x1234a5890>
```

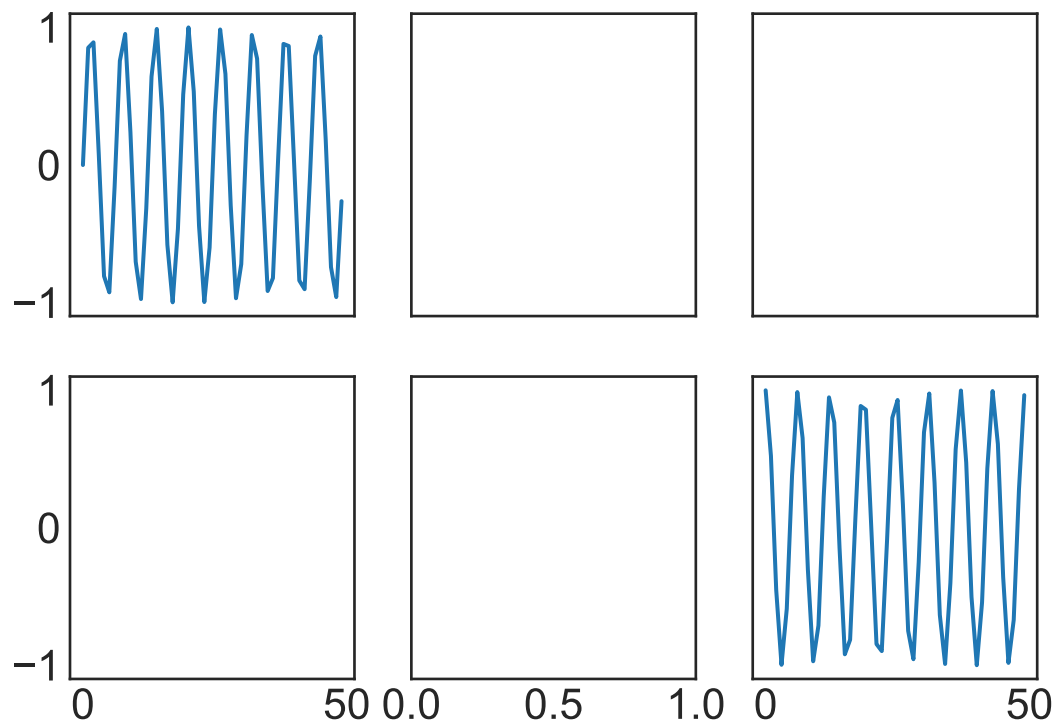


### Multiple Subplots

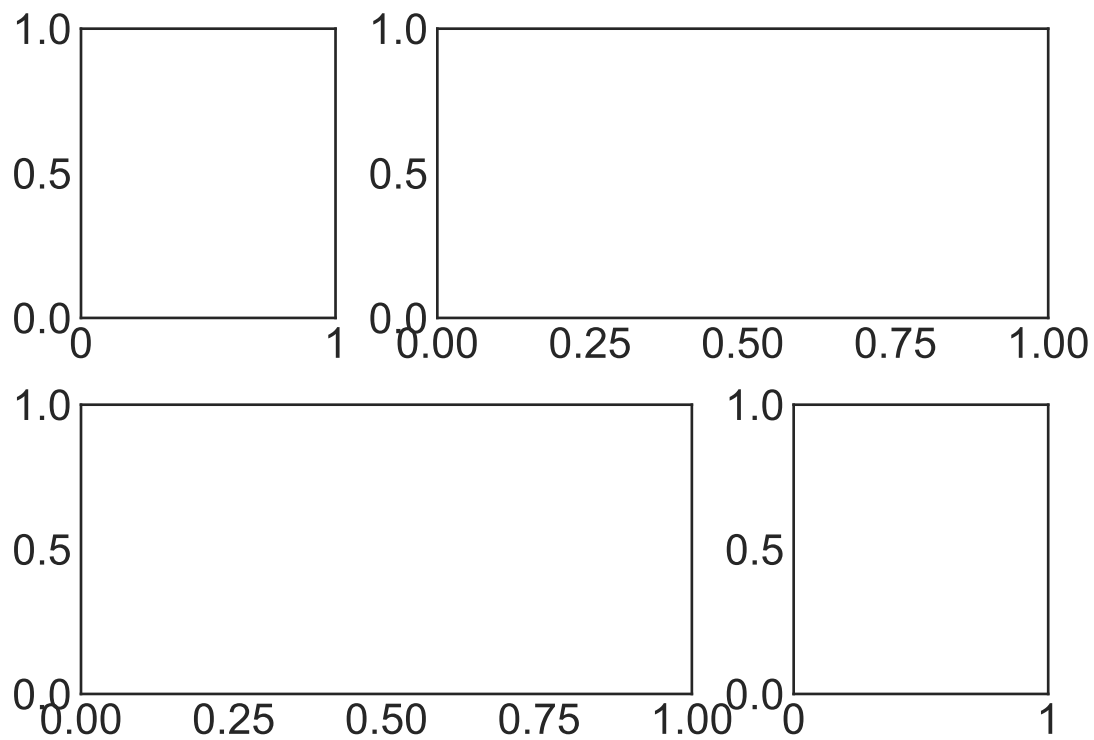
2. Create a 2x3 grid of plots as follows:



3. Create a 2x3 grid of plots as follows:



4. Create the following plot:



## Marginal Boxplots

5. Use the `mpg.csv` dataset to create the following plot that shows the relationship between the variables `displ` and `hwy`. In addition, it shows the distribution of both using boxplots.

```
## [(), []]
```

```
## [(), []]
```

```
## [Text(0, 0.5, 'hwy'), Text(0.5, 0, 'displ'), Text(0.5, 1.0, 'Scatterplot with Histograms \n displ vs
```



