

Chapter 4 - Practical Data Visualization

Segment 3 - Plot Formating

```
In [2]: import numpy as np
import pandas as pd
from pandas import Series, DataFrame

import matplotlib.pyplot as plt
from pylab import rcParams
```

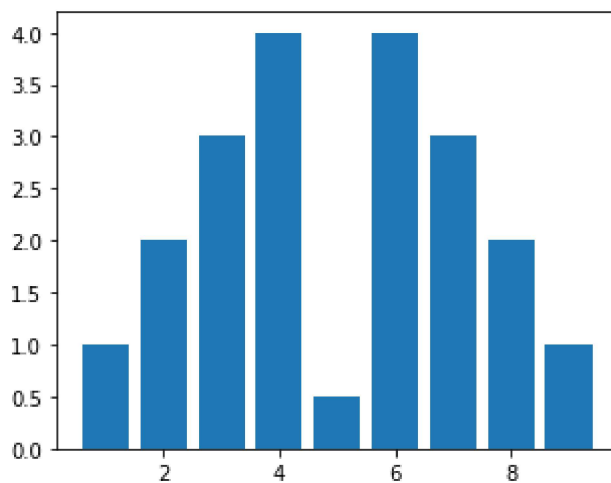
```
In [4]: %matplotlib inline
rcParams['figure.figsize'] = 5, 4
```

Defining plot color

```
In [5]: x = range(1,10)
y = [1,2,3,4,0.5,4,3,2,1]

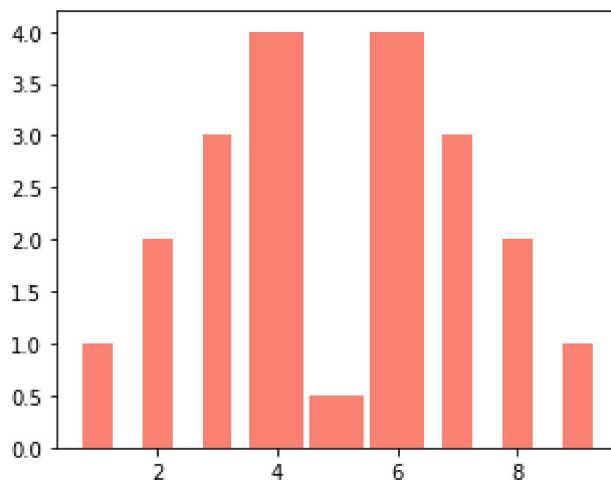
plt.bar(x,y)
```

Out[5]: <BarContainer object of 9 artists>



```
In [6]: wide = [.5,.5,.5,.9,.9,.9,.5,.5,.5]
color = ['salmon']
plt.bar(x, y, width=wide, color=color, align = 'center')
```

Out[6]: <BarContainer object of 9 artists>

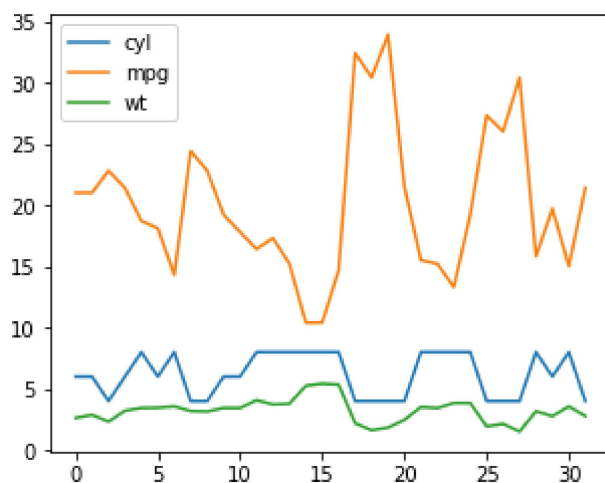


```
In [7]: address = 'C:/Users/danal/Desktop/ExerciseFiles/Data/mtcars.csv'

cars = pd.read_csv(address)
cars.columns = ['car_names', 'mpg', 'cyl', 'disp', 'hp', 'drat', 'wt', 'qsec', 'v

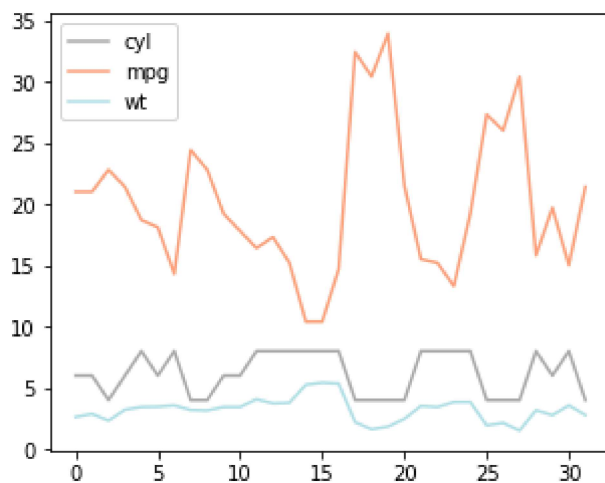
df = cars[['cyl', 'mpg', 'wt']]
df.plot()
```

Out[7]: <matplotlib.axes._subplots.AxesSubplot at 0x20aebc76948>

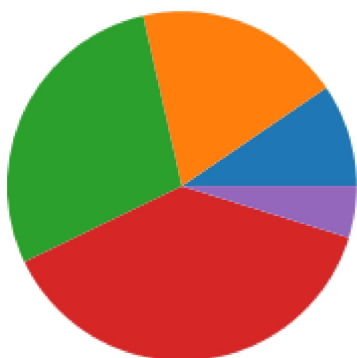


```
In [8]: color_theme = ['darkgray', 'lightsalmon', 'powderblue']  
df.plot(color=color_theme)
```

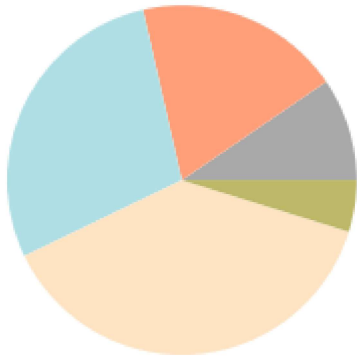
Out[8]: <matplotlib.axes._subplots.AxesSubplot at 0x20aebd06248>



```
In [9]: z = [1, 2, 3, 4, .5]  
plt.pie(z)  
plt.show()
```



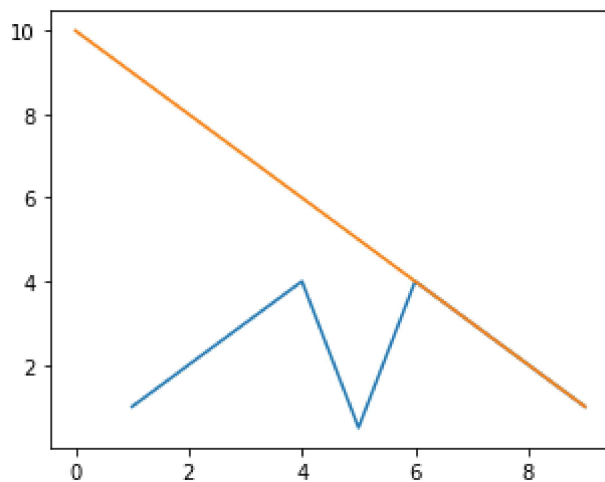
```
In [10]: color_theme = ['#A9A9A9', '#FFA07A', '#B0E0E6', '#FFE4C4', '#BDB768']  
plt.pie(z, colors=color_theme)  
plt.show()
```



Customizing line styles

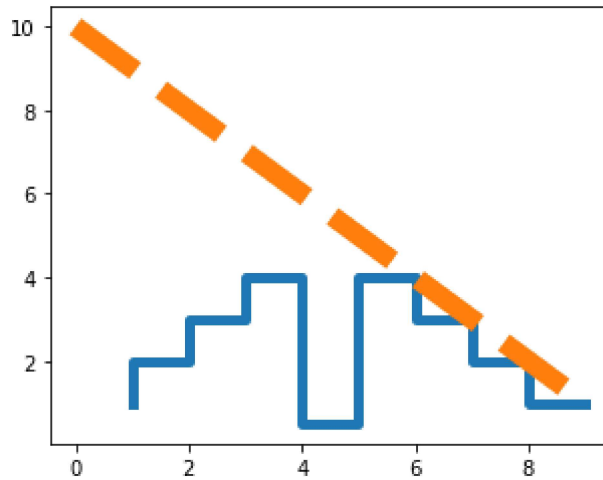
```
In [11]: x1 = range(0,10)  
y1 = [10,9,8,7,6,5,4,3,2,1]  
  
plt.plot(x,y)  
plt.plot(x1,y1)
```

```
Out[11]: [<matplotlib.lines.Line2D at 0x20aeb442c8>]
```



```
In [12]: plt.plot(x, y, ds='steps',lw=5)  
plt.plot(x1,y1, ls='--', lw=10)
```

Out[12]: [<matplotlib.lines.Line2D at 0x20aeb99208>]



Setting plot markers

```
In [14]: plt.plot(x, y, marker='1', mew=20)  
plt.plot(x1, y1, marker='+', mew=15)
```

Out[14]: [<matplotlib.lines.Line2D at 0x20aec0f6508>]

