# **Scatter Ploting**

### **Importing Libraries**

```
In [3]: import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
```

#### Ploting one point

### Ploting multiple pints

0.5

1.0

1.5

0.0

```
In [31]: x = [1,2,3,4,5,5]
```

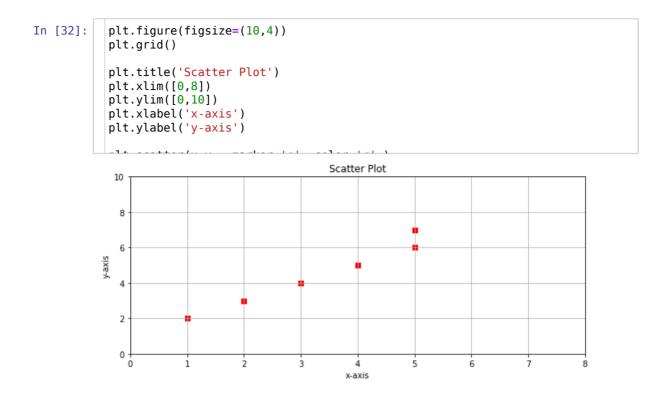
3.0

3.5

4.0

2.5

2.0 x-axis



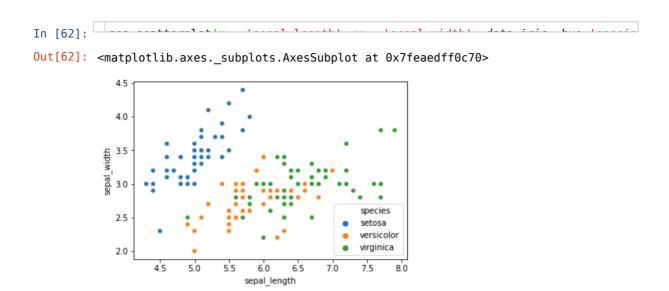
### ploting Tv Marketing Data

```
In [331: _____
In [50]:
Out[50]: Index(['TV', 'Sales'], dtype='object')
            plt.figure(figsize=(10,4))
In [40]:
            plt.grid()
            plt.title('Scatter Plot')
            plt.xlabel('x-axis')
plt.ylabel('y-axis')
                                                 Scatter Plot
             25
             20
             15
             10
                              50
                                         100
                                                    150
                                                                200
                                                                            250
                                                                                       300
                                                   x-axis
```

## Working with iris data

```
In [51]:
In [63]:
Out[63]:
                 sepal_length sepal_width petal_length petal_width
                                                                 species
            101
                         5.8
                                    2.7
                                                5.1
                                                            1.9
                                                                 virginica
             12
                         4.8
                                    3.0
                                                1.4
                                                            0.1
                                                                  setosa
             76
                         6.8
                                    2.8
                                                4.8
                                                            1.4 versicolor
              2
                         4.7
                                    3.2
                                                1.3
                                                            0.2
                                                                  setosa
             56
                         6.3
                                    3.3
                                                4.7
                                                                versicolor
                                                            1.6
                         5.7
                                    2.8
             55
                                                4.5
                                                            1.3
                                                                versicolor
                         5.0
                                    3.4
                                                1.5
                                                            0.2
                                                                  setosa
             51
                         6.4
                                    3.2
                                                4.5
                                                            1.5 versicolor
             80
                         5.5
                                    2.4
                                                3.8
                                                            1.1
                                                                versicolor
             17
                         5.1
                                    3.5
                                                1.4
                                                            0.3
                                                                  setosa
In [61]:
             plt.figure(figsize=(10,4))
             plt.grid()
             plt.title('Scatter Plot')
             plt.xlabel('x-axis')
plt.ylabel('y-axis')
                                                     Scatter Plot
              4.5
              4.0
              3.5
              3.0
              2.5
              2.0
                        4.5
                                  5.0
                                             5.5
                                                       6.0
                                                                 6.5
                                                                           7.0
                                                                                      7.5
                                                                                                8.0
```

x-axis



Assembled & Compiled by : Hafiz Muhammad Waqas