

```
In [3]: import pandas as pd
a=pd.Series([10,20,30,40,50])
b=pd.Series([40,50,60,70,80])
print("Series a: ",a)
print("\nSeries b: ",b)
print("\nSmallest in a is: ",a.min())
print("Largest in a is: ",a.max())
print("Sum of b is: ",b.sum())
print("Average of a is: ",a.mean())
print("Median of b is: ",b.median())
notcom=a[~a.isin(b)].tolist()+b[~b.isin(a)].tolist()
print("\nNot common in the both series: \n",notcom)
```

```
Series a:  0    10
```

```
1    20
2    30
3    40
4    50
dtype: int64
```

```
Series b:  0    40
```

```
1    50
2    60
3    70
4    80
dtype: int64
```

```
Smallest in a is:  10
```

```
Largest in a is:  50
```

```
Sum of b is:  300
```

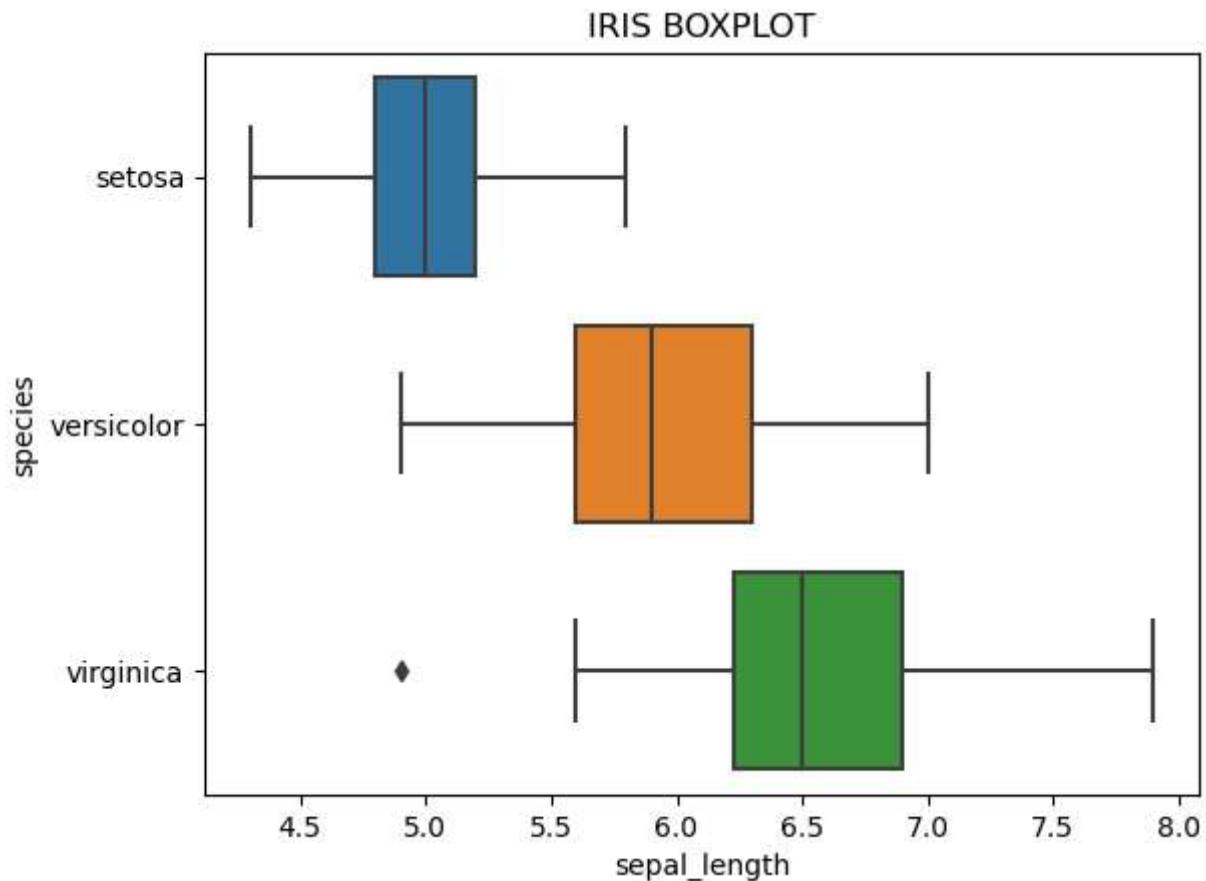
```
Average of a is:  30.0
```

```
Median of b is:  60.0
```

```
Not common in the both series:
```

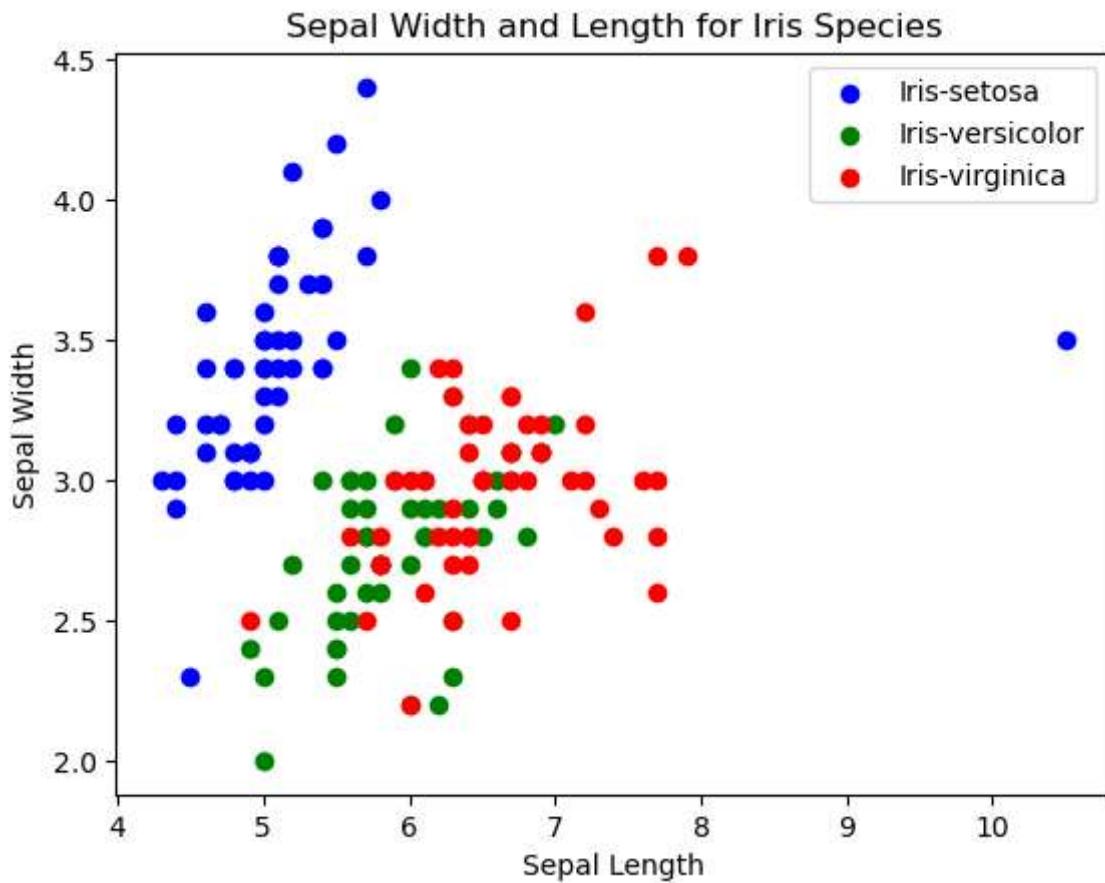
```
[10, 20, 30, 60, 70, 80]
```

```
In [10]: import seaborn as pd
import matplotlib.pyplot as plt
d=s.load_dataset('iris')
s.boxplot(x=d['sepal_length'],y=d['species'])
plt.title('IRIS BOXPLOT')
plt.show()
```



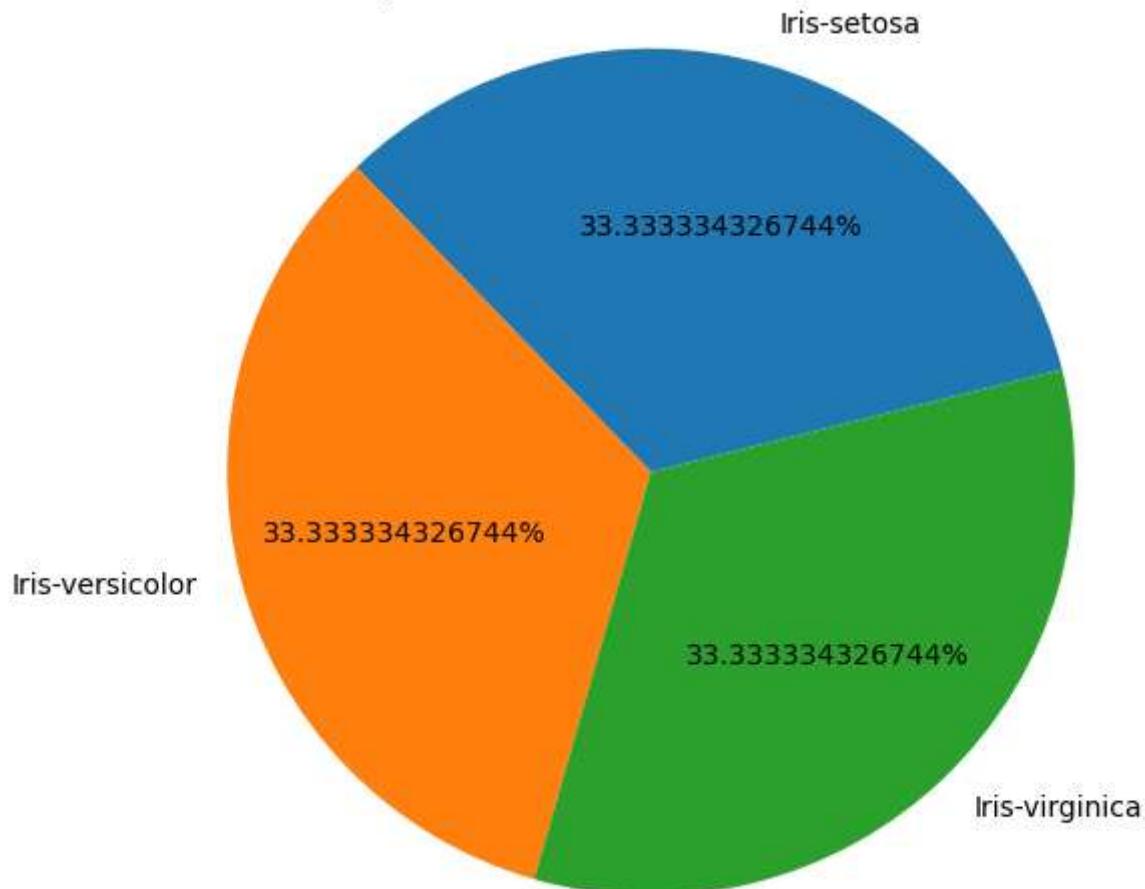
In [9]:

```
import pandas as pd
from matplotlib import pyplot as plt
t = pd.read_csv("D:\AIML\IRIS (1).csv")
species_colors = {'Iris-setosa': 'b', 'Iris-versicolor': 'g', 'Iris-virginica': 'r'}
for species, color in species_colors.items():
    sl = t[t['species'] == species]['sepal_length']
    sw = t[t['species'] == species]['sepal_width']
    plt.scatter(sl, sw, color=color, label=species)
plt.legend()
plt.xlabel('Sepal Length')
plt.ylabel('Sepal Width')
plt.title('Sepal Width and Length for Iris Species')
plt.show()
```



```
In [8]: import pandas as pd
import matplotlib.pyplot as plt
data = pd.read_csv("D:\AIML\IRIS (1).csv")
species_counts = data['species'].value_counts()
plt.figure(figsize=(6,6))
plt.pie(species_counts, labels=species_counts.index, autopct='%1.12f%%', startangle=144)
plt.axis('equal')
plt.title('Species Distribution in Iris Dataset')
plt.show()
```

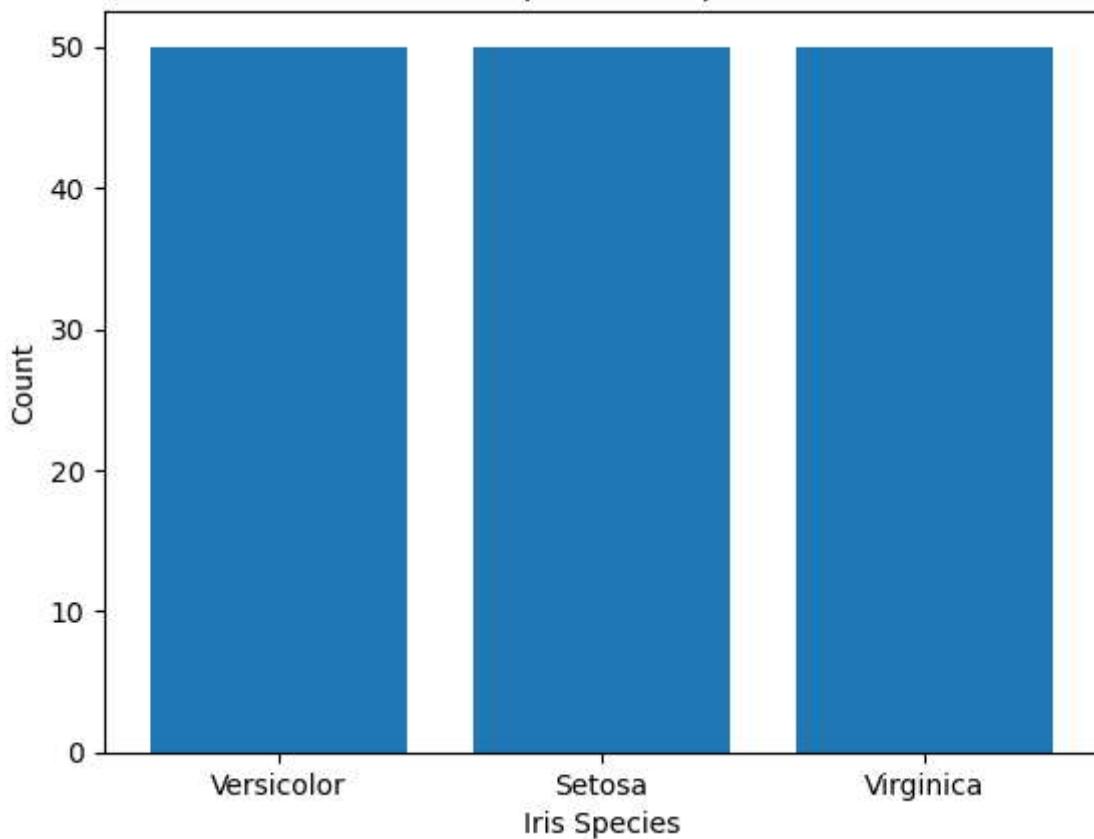
Species Distribution in Iris Dataset



In [12]:

```
import pandas as p
import matplotlib.pyplot as plt
df=p.read_csv("D:\AIML\IRIS (1).csv")
flower_counts=df['species'].value_counts()
plt.bar(['Versicolor','Setosa','Virginica'], flower_counts)
plt.xlabel('Iris Species')
plt.ylabel('Count')
plt.title('Bar Graph of Iris Species')
plt.show()
```

Bar Graph of Iris Species



In []: