

```
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

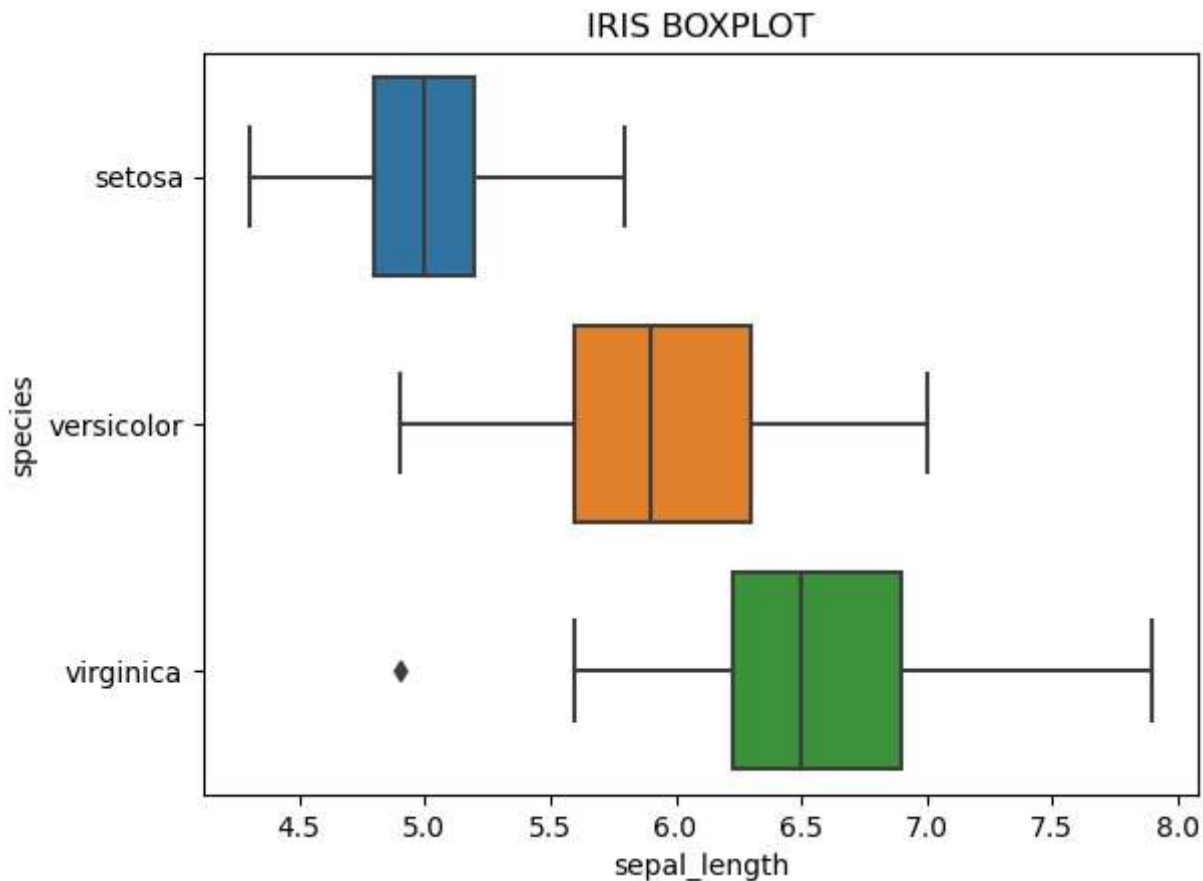
Average of a is: 30.0

Median of b is: 60.0

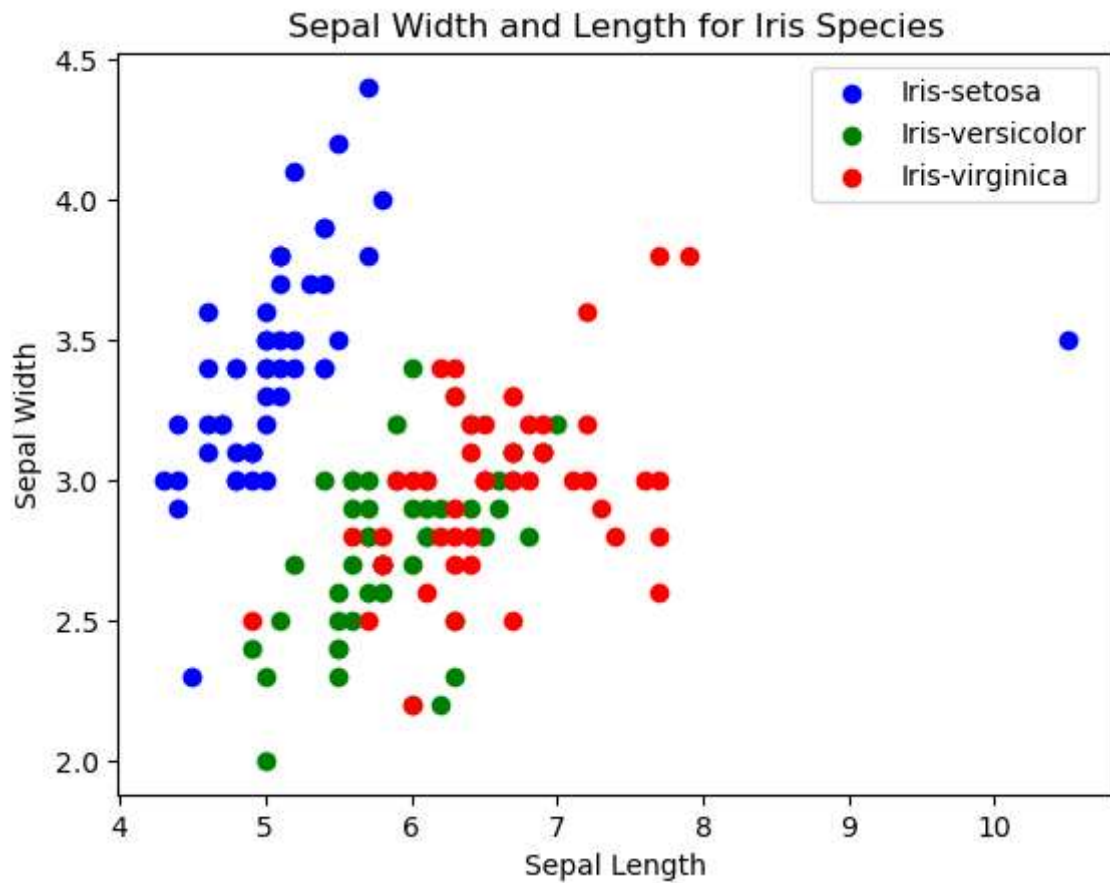
Not common in the both series:

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

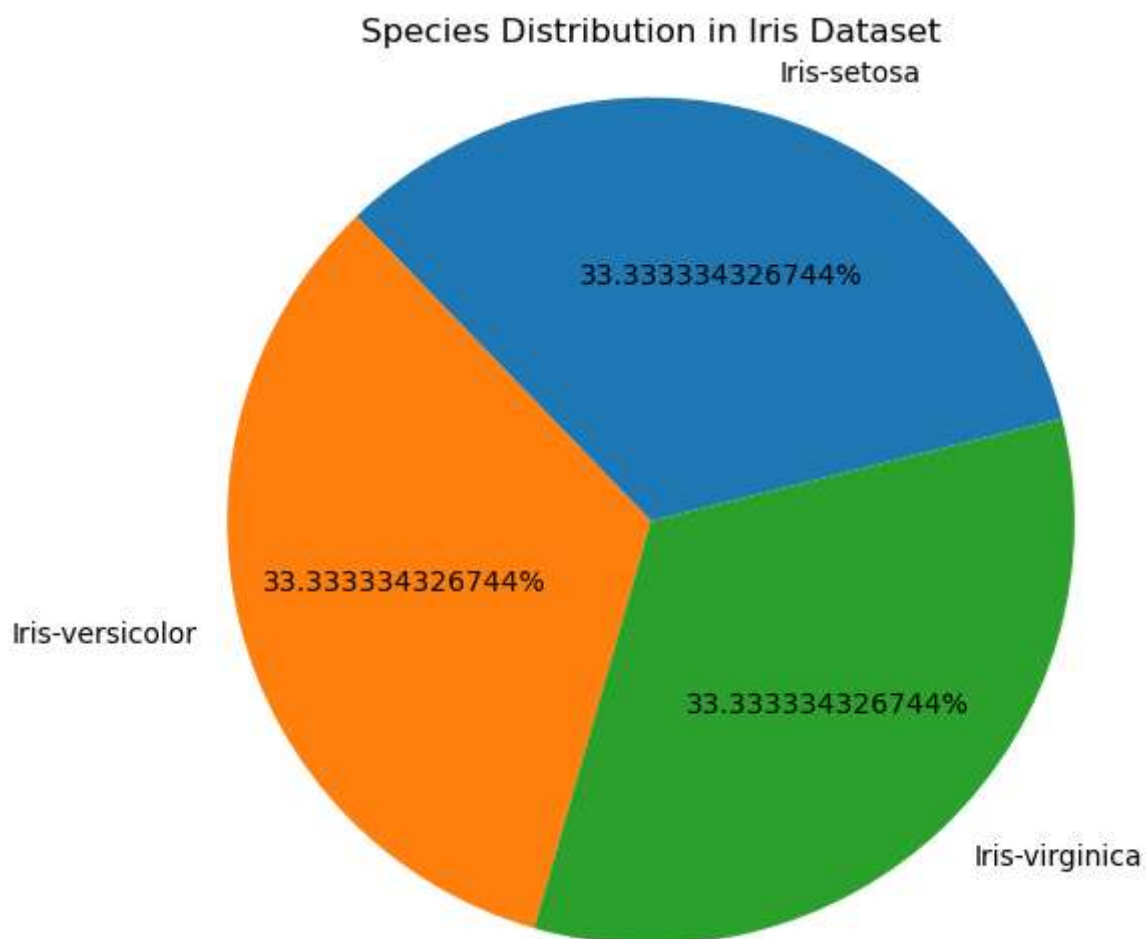
```
In [10]: import seaborn as pd
import matplotlib.pyplot as plt
d=s.load_dataset('iris')
s.boxplot(x=d['sepal_length'],y=d['species'])
plt.title('IRIS BOXPLOT')
plt.show()
```



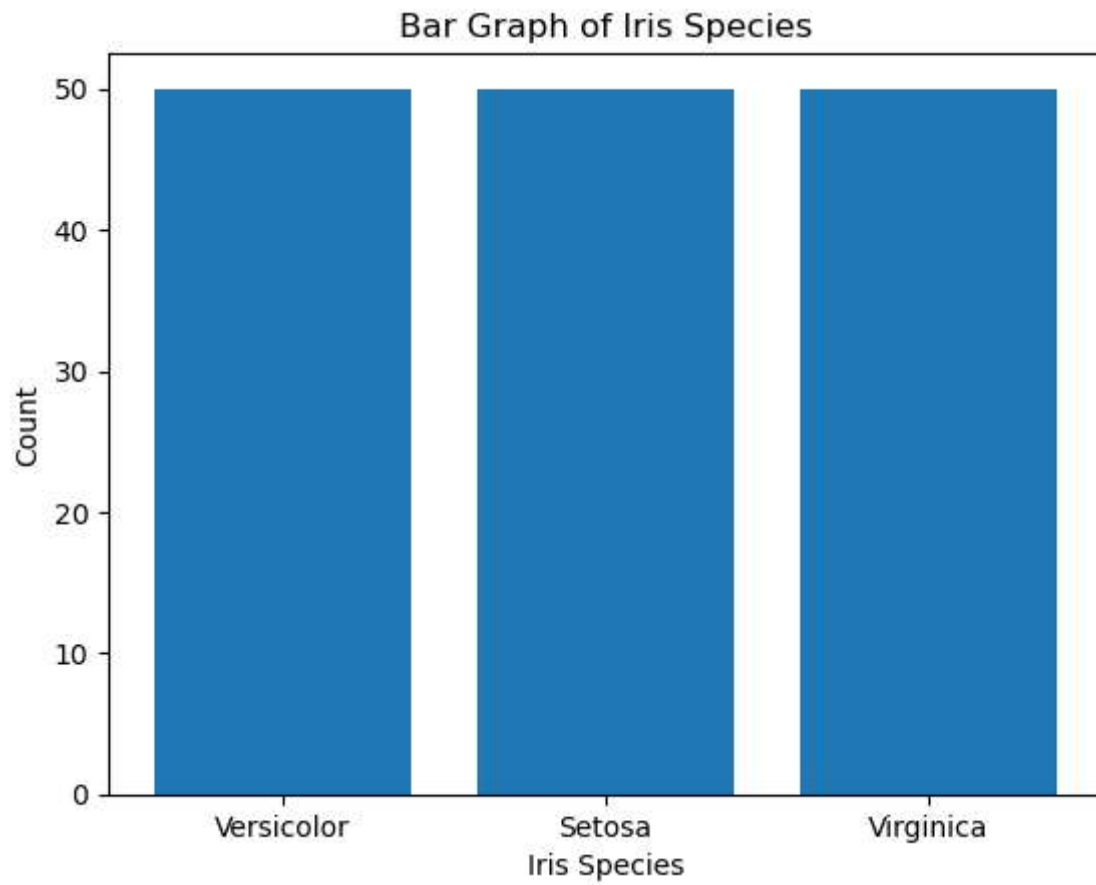
```
In [9]: import pandas as pd
from matplotlib import pyplot as plt
t = pd.read_csv("D:\\AIML\\IRIS (1).csv")
species_colors = {'Iris-setosa': 'b', 'Iris-versicolor': 'g', 'Iris-virginica': 'r'}
for species, color in species_colors.items():
    sl = t[t['species'] == species]['sepal_length']
    sw = 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=14)
plt.axis('equal')
plt.title('Species Distribution in Iris Dataset')
plt.show()
```



```
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()
```



In []: