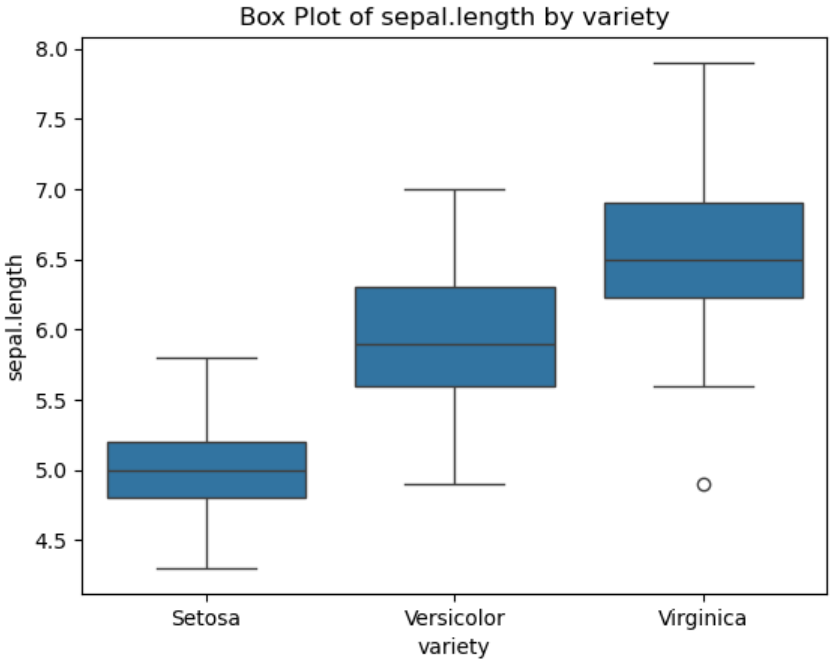
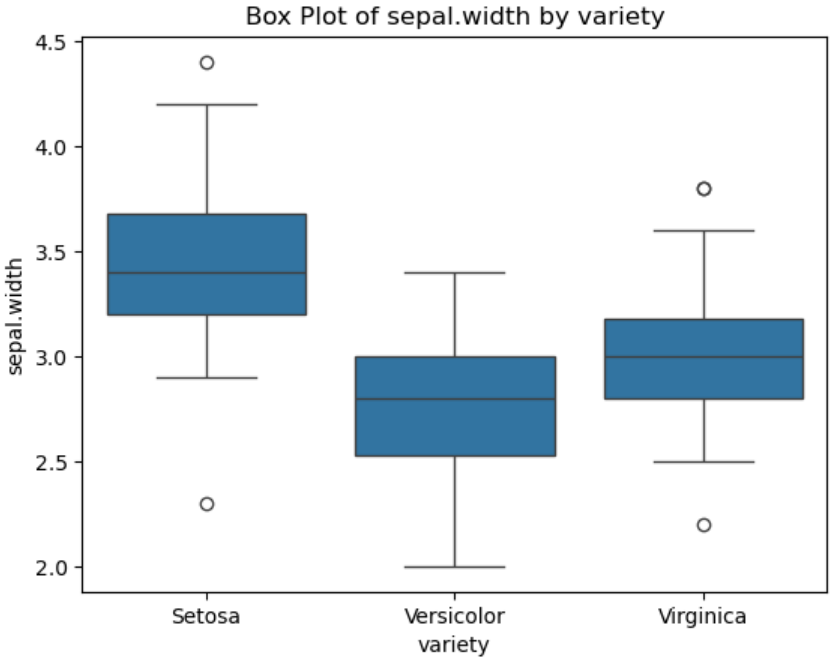
A)Write a Python program to create box plots to see how each feature i.e. Sepal Length,Sepal Width, Petal Length, Petal Width are distributed across the three species. (Use iris.csv dataset)

In [1]:
```
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
dt = pd.read_csv('iris.csv')

sns.boxplot(x='variety', y='sepal.length', data=dt)
plt.title('Box Plot of sepal.length by variety')
plt.show()
```

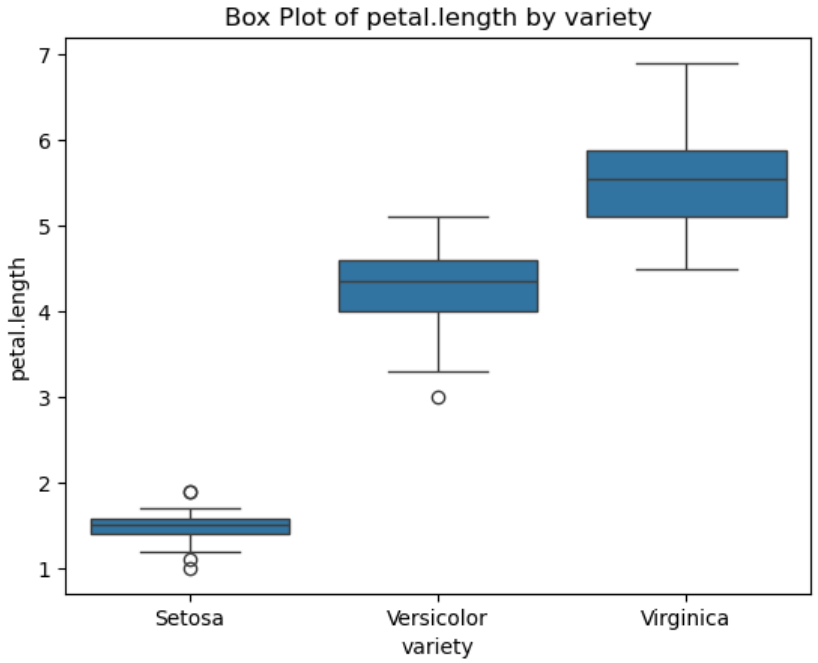


In [2]:
```
sns.boxplot(x='variety', y='sepal.width', data=dt)
plt.title('Box Plot of sepal.width by variety')
plt.show()
```

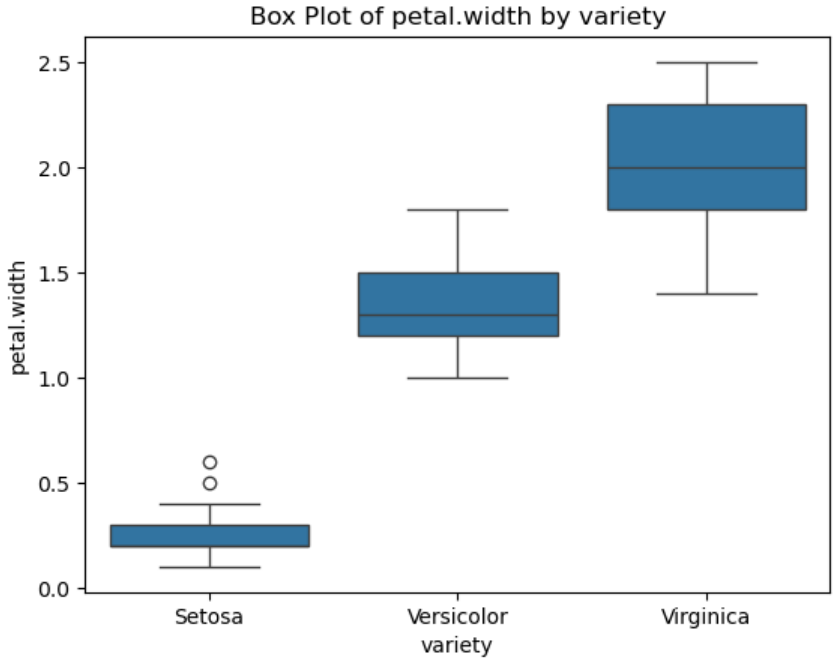


In [4]:
```
sns.boxplot(x='variety', y='petal.length', data=dt)
```

```
plt.title('Box Plot of petal.length by variety')
plt.show()
```



In [5]:
```
sns.boxplot(x='variety', y='petal.width', data=dt)
plt.title('Box Plot of petal.width by variety')
plt.show()
```



B) Use the heights and weights dataset and load the dataset from a given csv file into a dataframe. Print the first, last 5 rows and random 10 row

In [6]:
```
import pandas as pd

df = pd.read_csv('weight-height.csv')

print("First 5 rows:")
print(df.head())

print("\nLast 5 rows:")
print(df.tail())

print("\nRandom 10 rows:")
```

```
print(df.sample(10))
```

```
First 5 rows:
  Gender     Height      Weight
0   Male  73.847017  241.893563
1   Male  68.781904  162.310473
2   Male  74.110105  212.740856
3   Male  71.730978  220.042470
4   Male  69.881796  206.349801

Last 5 rows:
      Gender     Height      Weight
9995  Female  66.172652  136.777454
9996  Female  67.067155  170.867906
9997  Female  63.867992  128.475319
9998  Female  69.034243  163.852461
9999  Female  61.944246  113.649103

Random 10 rows:
      Gender     Height      Weight
5120  Female  65.535087  146.135542
1657    Male  71.574723  207.816944
9796  Female  63.732831  143.187430
7725  Female  63.897420  138.190283
426     Male  60.748118  136.167866
2864    Male  69.244640  179.366457
2990    Male  69.717138  201.471331
6886  Female  60.129660  122.924091
6508  Female  62.231397  142.155661
7117  Female  67.922763  172.168293
```