IT Workshop Assignment 2

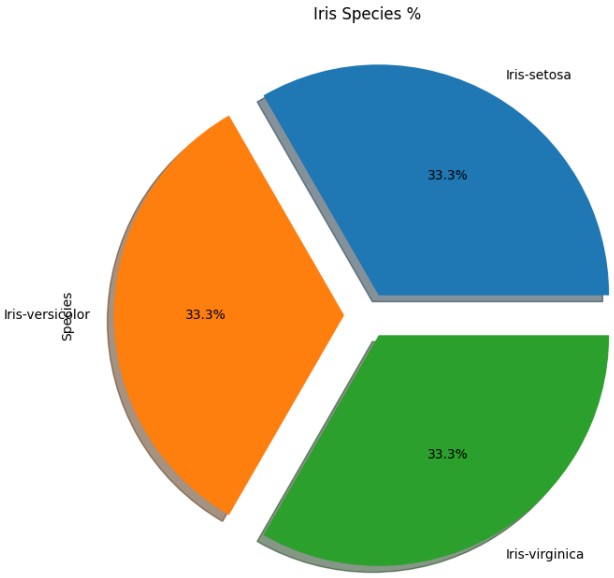
The following data includes three species iris flower with 50 samples each as well as some properties about each flower.

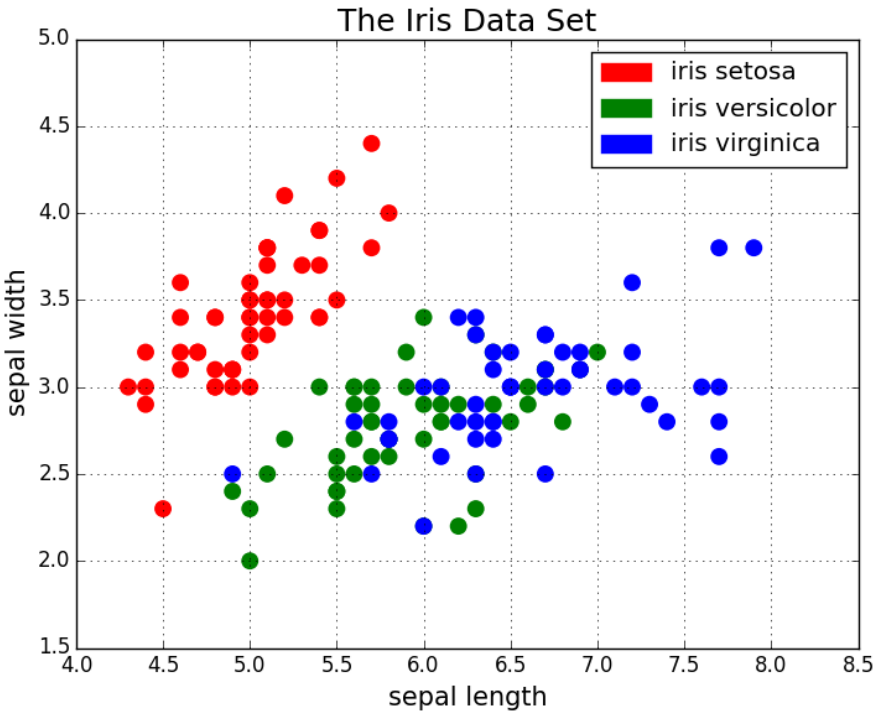
The columns in this dataset are:

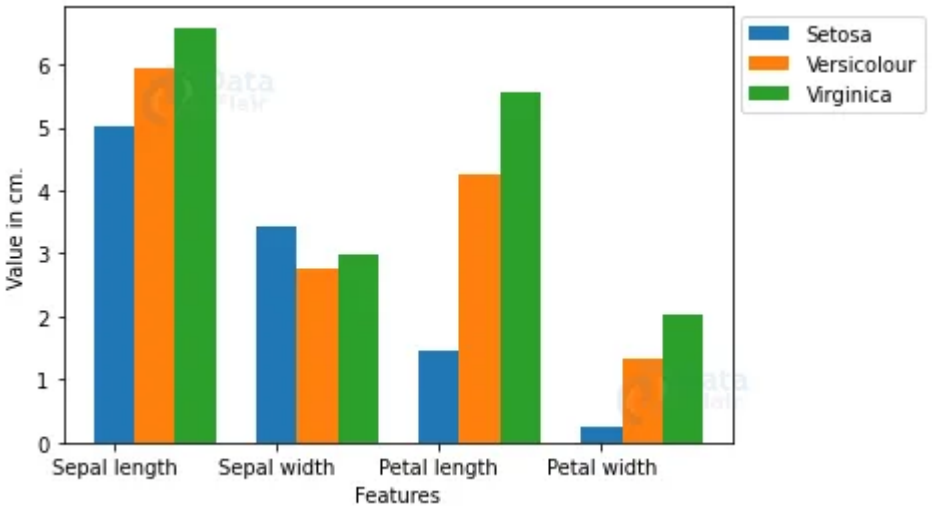
1. Sepal Length
2. Sepal Width
3. Petal Length
4. Petal Width
5. Species

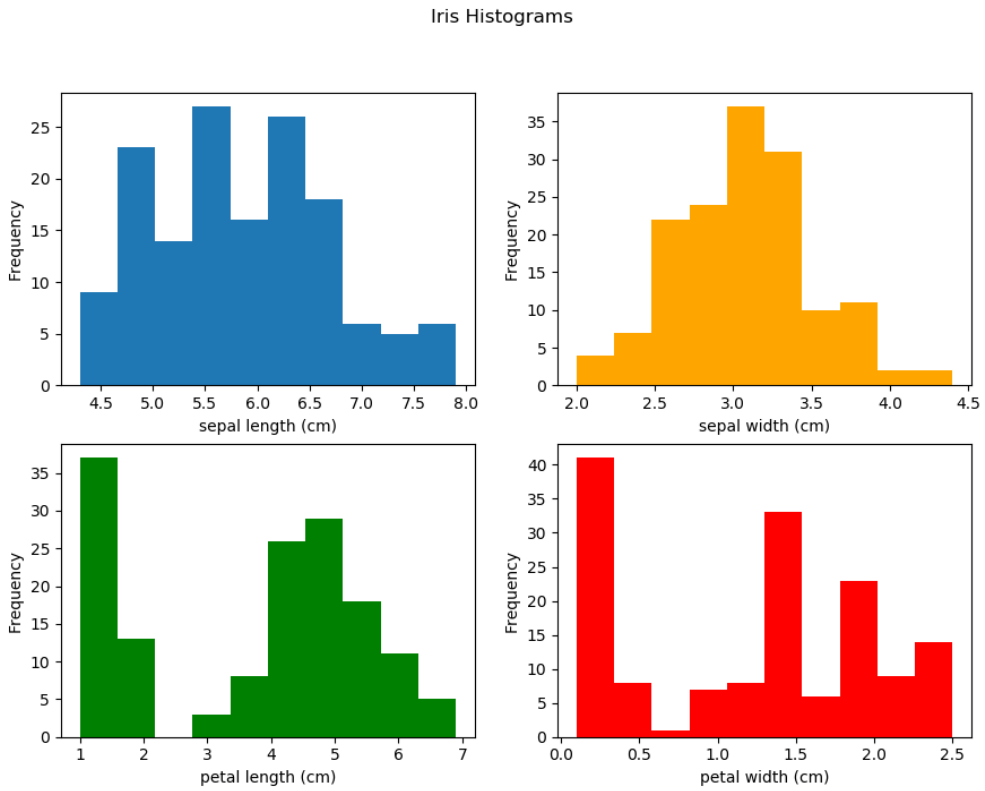
Link to the data:
https://github.com/rguktb-cse/CS2702_ITWORKSHOP/blob/main/python%20class%20codes/iris.csv

Using the Python libraries Pandas and Matplotlib prepare the following plots. Save the figures and prepare a latex document adding both plots and python code snippet.




The Iris Data Set
iris setosa
iris versicolor
iris virginica
sepal width
sepal length
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5


Setosa
Versicolour
Virginica
Value in cm.
Features
Sepal length
Sepal width
Petal length
Petal width
0
1
2
3
4
5
6



Adding Python Code in latex with syntax highlight:
See example: https://www.overleaf.com/learn/latex/Code_listing

Sample:

```
import numpy as np

def incmatrix(genl1,genl2):
    m = len(genl1)
    n = len(genl2)
    M = None #to become the incidence matrix
    VT = np.zeros((n*m,1), int)  #dummy variable

    #compute the bitwise xor matrix
    M1 = bitxormatrix(genl1)
    M2 = np.triu(bitxormatrix(genl2),1)
```

END