## Data Science And Big Data Analytics Practical 3(2)

Name: - Deepak Bohara

Roll no:- 23225

Class:- TE2(COMP)

\_\_\_\_\_\_

## **Problem Statement:-**

Write a Python program to display some basic statistical details like percentile, mean, standard deviation etc. of the species of 'Iris-setosa', 'Iris-versicolor' and 'Iris-versicolor' of iris.csv dataset.

\_\_\_\_\_\_

```
In [26]: import pandas as pd
        url link = 'https://raw.githubusercontent.com/DeBugg14/te-sppu-lab/main/Data-Science/Prac3/iris.csv'
        data = pd.read csv(url link)
In [27]: | print('Iris-setosa')
        setosa = data['variety'] == 'Setosa'
        print(data[setosa].describe())
        Iris-setosa
              sepal.length sepal.width petal.length petal.width
                50.00000 50.000000 50.000000 50.000000
                            3.428000
                                         1.462000
                                                   0.246000
        mean
                  5.00600
                            0.379064
                                         0.173664
                                                   0.105386
        std
                  0.35249
                                         1.000000
                  4.30000
                             2.300000
                                                      0.100000
        min
                  4.80000
                             3.200000
                                          1.400000
                                                      0.200000
        50%
                  5.00000
                             3.400000
                                          1.500000
                                                      0.200000
                                         1.575000
                                                    0.300000
                            3.675000
        75%
                  5.20000
                                       1.900000
                           4.400000
                                                    0.600000
                  5.80000
        max
In [28]: | print('Iris-versicolor')
        setosa = data['variety'] == 'Versicolor'
        print(data[setosa].describe())
        Iris-versicolor
              sepal.length sepal.width petal.length petal.width
               50.000000 50.000000 50.000000 50.000000
        count.
                           2.770000
                 5.936000
                                          4.260000
                                                     1.326000
        mean
        std
                 0.516171
                             0.313798
                                          0.469911
                                                      0.197753
                                          3.000000
        min
                 4.900000
                             2.000000
                                                      1.000000
                             2.525000
        25%
                 5.600000
                                          4.000000
                                                      1.200000
                            2.800000
                                         4.350000
                                                     1.300000
        50%
                 5.900000
        75%
                          3.000000
                                         4.600000
                                                   1.500000
                 6.300000
                                       5.100000
                 7.000000
                            3.400000
                                                   1.800000
        max
In [29]: print('Iris-virginica')
        setosa = data['variety'] == 'Virginica'
        print(data[setosa].describe())
        Iris-virginica
              sepal.length sepal.width petal.length petal.width
                                                   50.00000
                50.00000
                           50.000000 50.000000
        count
        mean
                  6.58800
                             2.974000
                                          5.552000
                                                       2.02600
                  0.63588
                             0.322497
                                          0.551895
                                                       0.27465
        std
                             2.200000
        min
                  4.90000
                                          4.500000
                                                       1.40000
                            2.800000
                                         5.100000
                                                      1.80000
        25%
                  6.22500
        50%
                  6.50000
                            3.000000
                                         5.550000
                                                      2.00000
                  6.90000
                           3.175000
                                         5.875000
        75%
                                                      2.30000
```

7.90000

3.800000

6.900000

2.50000