

1. Read the IRIS_Flower dataset into a dataframe
2. Write a program in python using Pandas Dataframe to generate the following results:

- a. Total no. of data-points: _____
- b. No. of classes: _____
- c. Data Distribution:
_____ (classname1) : _____ (count1)
_____ (classname2) : _____ (count2)
...
...
- d. No. of features: _____
- e. Min_max of the features:
_____ (feature1) : _____ (min) : _____ (max)
_____ (feature2) : _____ (min) : _____ (max)
...
...
- f. Mean & variance of the features:
_____ (feature1) : _____ (mean) : _____ (variance)
_____ (feature2) : _____ (mean) : _____ (variance)
...
...
- g. Classwise min_max of each feature:
_____ (classname1):
_____ (feature1) : _____ (min) : _____ (max)
_____ (feature2) : _____ (min) : _____ (max)
...
...
_____ (classname2):
_____ (feature1) : _____ (min) : _____ (max)
_____ (feature2) : _____ (min) : _____ (max)
...
...
- h. Classwise mean and variance of each feature:
_____ (classname1):
_____ (feature1) : _____ (mean) : _____ (variance)
_____ (feature2) : _____ (mean) : _____ (variance)
...
...
_____ (classname2):
_____ (feature1) : _____ (mean) : _____ (variance)
_____ (feature2) : _____ (mean) : _____ (variance)
...
...
- i. Plot the values of each features using different colours for different classes
- j. Randomly split this dataset into two seperate datasets containing 80% and 20% data points, and print their descriptions