

HW1

Use Python to finish the following questions. For the Iris dataset:

1. Read in the dataset and calculate the following parameters

- μ_j (1) Means of the four features (sepal length, sepal width, petal length, petal width) for three classes, respectively.
- σ_j (2) Standard deviation of the four features for three classes, respectively.
- (3) Calculate the standardized features of the three classes, respectively.

$$x'_j = \frac{x_j - \mu_j}{\sigma_j}$$

2. Plot the data using as two features as (x-axis, y-axis) of the following two classes respectively. (a) (sepal width, petal width) of setosa and vericolor, (b) (sepal length, petal width) of vericolor and virginica, (c) (sepal length, petal length) of vericolor and setosa.