

MACHINE LEARNING

ASSIGNMENT-1

NAME: Suraj kumar

Uni.Rollno: 1900282

CLASS: Btech (CSE 3)

Submitted to: Ms. Shewta ma'am

Dataset: iris(download csv file from Kaggle)

This case study will use data science and machine learning to classify Iris flowers into 3

species:

- Iris-setosa
- Iris-versicolor
- Iris-virginica

Features:

- petal length
- Petal width
- Sepal length
- Sepal width

Please perform the following steps to complete this case study:

1. Create a new empty File in spyder

2. Import all the modules required for:

- numpy
- pandas
- matplotlib
- sklearn/scikit

3. Read the iris.csv file into a Pandas DataSet called: iris ◦ Use the pandas read_csv method.

Note: **(Make sure you only have one index column)**

4. Use the describe method to display some stats about the data.

5. Prepare your X and y, using appropriate variable names:

- X: Drop the Species column.
- y: Specify the Species column.

6. Split the data into training and testing data.

- Use sklearn train_test_split to split the data.

7. Create the model and fit it to the training data.

- Use the fit method to fit it to the training data.

8 Predict values based on testing data.

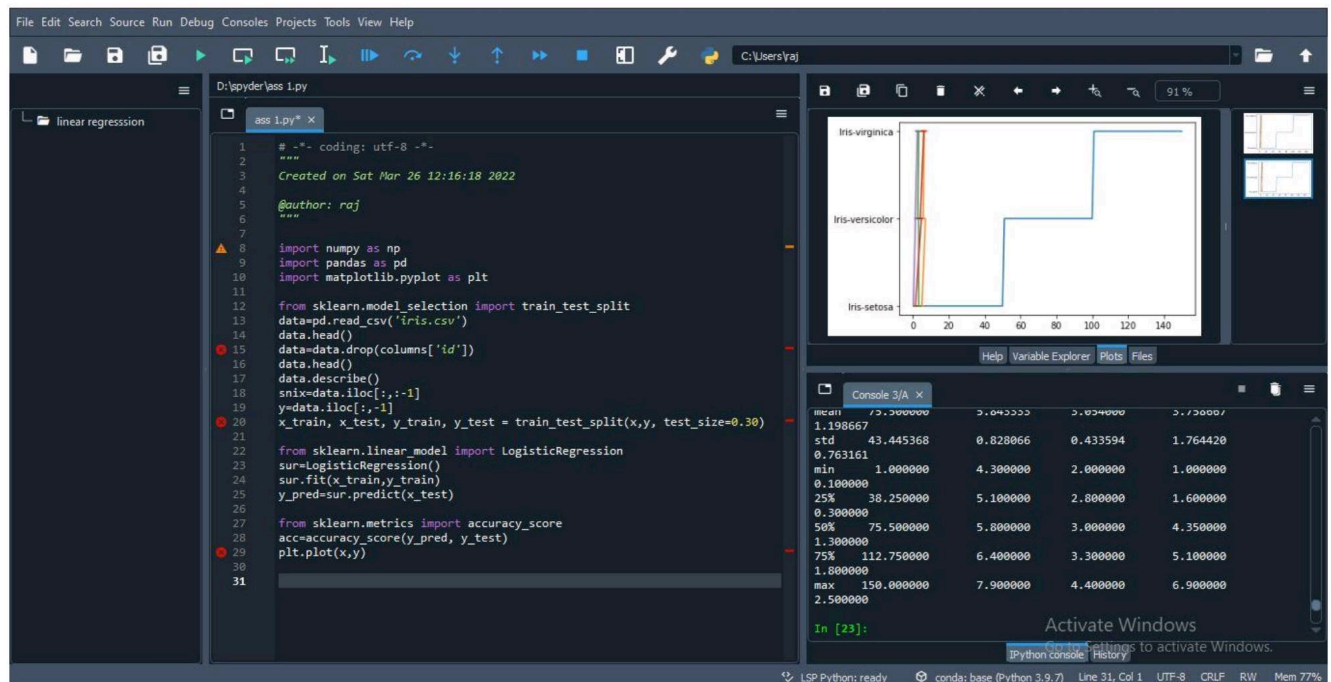
- Use the predict method to predict values with the x testing data and store them in a variable.

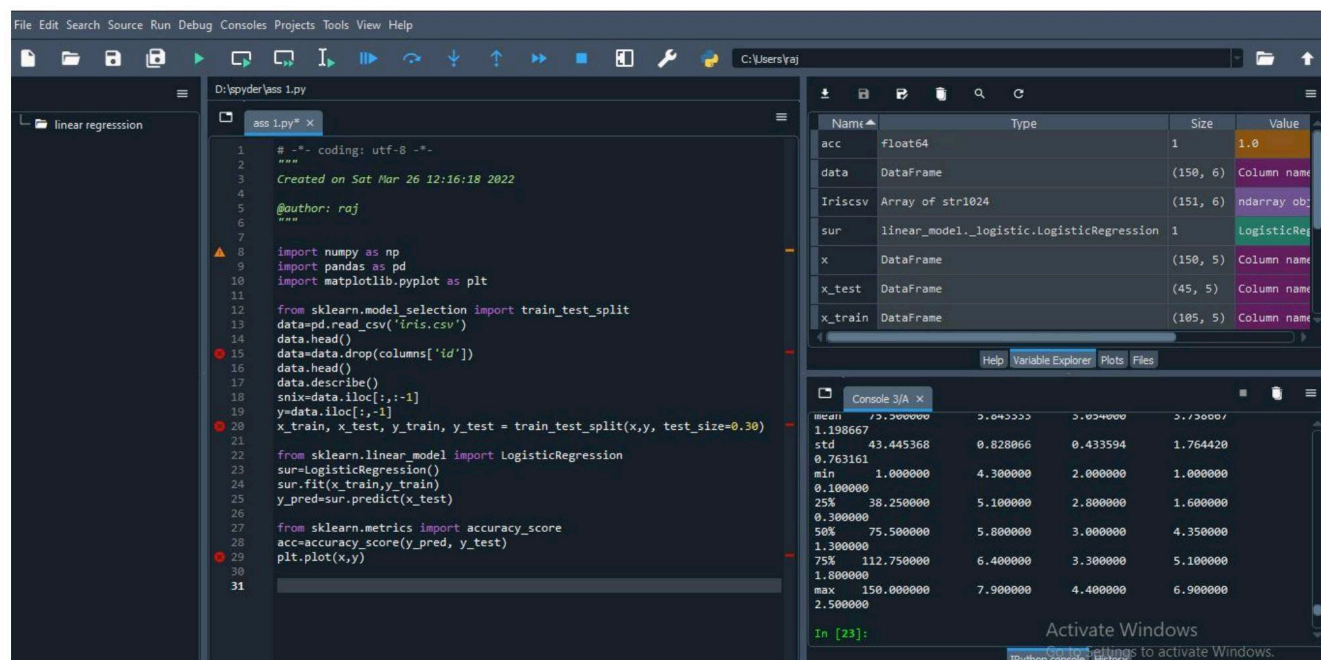
9. Print out the classification report for the y test data and the predictions.

10. Support your Case studies with plotting graphs by using

matplotlib

Ans:





Accuracy of model is 93%