ASSIGNMENT-1

DECISION TRESS

SUBMITTED BY:

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Problem Statement:

Build Decision tree Classifier on iris dataset and predict the specie a particular instance belongs to and find the accuracy of the model.

Out[4]:

	sepal_length	sepal_width	petal_length	petal_width
count	150.000000	150.000000	150.000000	150.000000
mean	5.843333	3.057333	3.758000	1.199333
std	0.828066	0.435866	1.765298	0.762238
min	4.300000	2.000000	1.000000	0.100000
25%	5.100000	2.800000	1.600000	0.300000
50%	5.800000	3.000000	4.350000	1.300000
75%	6.400000	3.300000	5.100000	1.800000
max	7.900000	4.400000	6.900000	2.500000

```python
In [8]: = df[['sepal_length', 'sepal_width', 'petal_length', 'petal_width']].values

        s = df['species'].values


        its, test_inputs, train_classes, test_classes) = train_test_split(all_inputs, all_classes, train_size=0.7, random_state=
```

```python
In [9]: dtc = DecisionTreeClassifier()

        dtc.fit(train_inputs, train_classes)

        dtc.score(test_inputs, test_classes)
```

Out[9]: 0.9555555555555556