SGT UNIVERSITY

Bachelor of Technology

Experiment File

For

Department of Computer Science and Engineering (CSE)

Bachelor of Technology

Course Name: New Age Skill
Course Code: 123456789

Semester: 1nd

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Executive Summary

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Contents of Course File

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Experiment-1

Prediction using Scikit Learn

1. Installation of Sklearn on our System
2. We need to first install the following libraries before installing sklearn as its
3. dependencies:
    a. 1. NumPy
    b. 2. SciPy
4. Before installing the sklearn library, verify that NumPy and SciPy are already installed
5. on the computer. Using pip after NumPy and SciPy have already been installed
6. correctly is the easiest way to install scikit-learn:
7. 1. pip install -U scikit-learn

Program to load the iris dataset as an example

```
from sklearn.datasets import load_iris

iris = load_iris()

# store the feature matrix (X) and response vector (y)

X = iris.data

y = iris.target

# store the feature and target names

feature_names = iris.feature_names

target_names = iris.target_names

# printing features and target names of our dataset

print("Feature names:", feature_names)

print("Target names:", target_names)

# X and y are numpy arrays

print("\nType of X is:", type(X))
```

```
# printing first 5 input rows

print("\nFirst 5 rows of X:\n", X[:5])
```

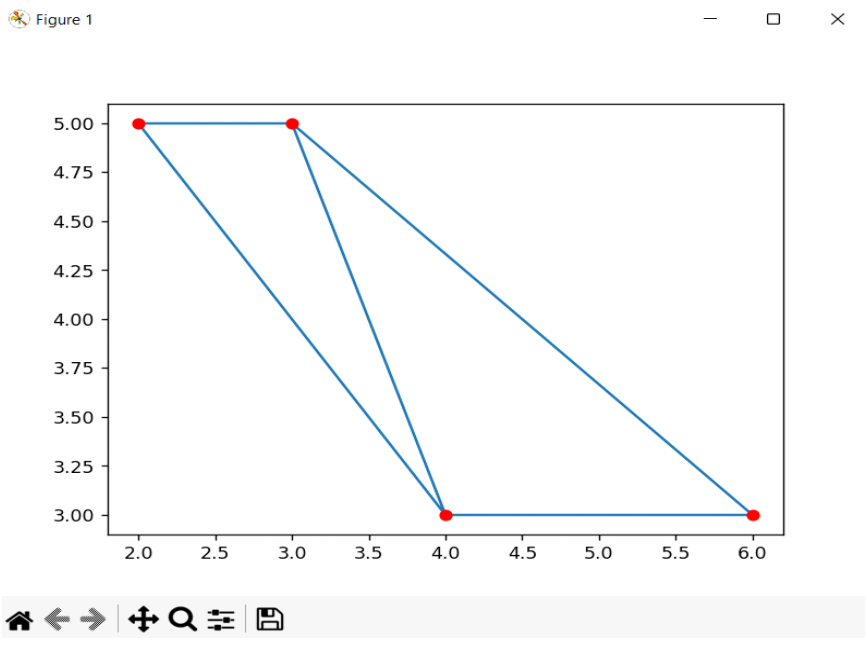
Output:-

```
Feature names: ['sepal length (cm)','sepal width (cm)',
 'petal length (cm)','petal width (cm)']

Target names: ['setosa' 'versicolor' 'virginica']

Type of X is:

First 5 rows of X:
 [[ 5.1 3.5 1.4 0.2]
 [ 4.9 3. 1.4 0.2]
 [ 4.7 3.2 1.3 0.2]
 [ 4.6 3.1 1.5 0.2]
 [ 5. 3.6 1.4 0.2]]
```



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