

Artificial Intelligence Lab Final, Spring 2018

Date: 4/4/2018

Total Marks – 25

Total Time – 1 Hour 15 Minutes

The given dataset contains 5 columns, the last column being the class name (Left / Right / Balanced), and the first 4 being numeric features.

1. Import the dataset into your python program using Pandas DataFrame. [2]
2. Split the dataset RANDOMLY into two portions – Training Data (575 Data), Test (50 Data). For this purpose, use the `train_test_split()` function which you used in your lab. Use the following code segment - [3]

```
from sklearn.model_selection import train_test_split()
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.08, random_state=42)
```

3. Predict all the class labels of each data point from the Test Set. [10]
4. Find the accuracy of your model. [5]

To find the accuracy -

Suppose, `original_y = [1,0,1,1]` and `predicted_y = [1,0,0,1]` So, there are 3 matches among the 4 values. So accuracy $\frac{3}{4} = 0.75 = 75\%$.