Table of Contents
Recipe Objective
Step 1 - Import the library
Step 2 - Setting up the Data
Step 3 - Training and Saving the model
Step 4 - Loading the saved model
Step 1 - Import the library

from sklearn import model\_selection, datasets
from sklearn.tree import DecisionTreeClassifier
from sklearn.externals import joblib
import pickle

We have imported model\_selection, datasets, joblib, DecisionTreeClassifier and pickel which will be needed for the dataset.

## Step 2 - Setting up the Data

We have loaded inbuilt wine dataset and stored data in x and target in y. We have used test\_train\_split to split the dat aset such that 30% of data is for testing the model.

```
dataset = datasets.load_wine()

X = dataset.data; y = dataset.target

X train, X test, y train, y test = model selection.train test split(X, y, test size=0.3)
```

Master the Art of Classification in Machine Learning to Become a Pro

## Step 3 - Training and Saving the model

We are using DecisionTreeClassifier as a model. We have trained the model by training data. We can save the model by using joblib.dump in which we have passed the parameter as model and the filename.

```
model = DecisionTreeClassifier()
model.fit(X_train, y_train)
filename = "Completed_model.joblib"
joblib.dump(model, filename)
```

## Step 4 - Loading the saved model

So here we are loading the saved model by using joblib.load and after loading the model we have used score to get t he score of the pretrained saved model.

```
loaded_model = joblib.load(filename)
result = loaded_model.score(X_test, y_test)
print(result)
So the output comes as:
```

## 0.944444444444444