Sania BiBi

Task # 18

```python
# Naive Bayes Implementation

from sklearn.naive_bayes import GaussianNB
from sklearn.datasets import load_iris
from sklearn.model_selection import train_test_split
from sklearn.metrics import accuracy_score

# Load the Iris dataset
data = load_iris()
X = data.data
y = data.target

# Splitling data into train and test
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.3, random_state=30)

# Train the model
clf = GaussianNB()
clf.fit(X_train, y_train)

y_pred = clf.predict(X_test)
accuracy = accuracy_score(y_test, y_pred)
print("Accuracy: {:.2f}%".format(accuracy*100))
```

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Accuracy: 95.56%
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```python
[9] # Decision Tree Implementation

    from sklearn.tree import DecisionTreeClassifier

    data = load_iris()
    X = data.data
    y = data.target

    X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.3, random_state=30)

    # Train the model
    clf = DecisionTreeClassifier(random_state=30)
    clf.fit(X_train, y_train)

    y_pred = clf.predict(X_test)
    accuracy = accuracy_score(y_test, y_pred)
    print("Accuracy: {:.2f}%".format(accuracy*100))
```

```
Accuracy: 95.56%
```