

Q2

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In [ ]: from sklearn.datasets import load_iris
        from sklearn.naive_bayes import GaussianNB
        from sklearn.model_selection import train_test_split
        from sklearn.metrics import accuracy_score, confusion_matrix
        import numpy as np
        import pandas as pd
```

```
In [ ]: iris = load_iris(as_frame=True)
        X = iris["data"]
        y = iris["target"]

        X_train, X_test, y_train, y_test = train_test_split(X, y, test_size = 0.20, random_
```

```
In [ ]: bayes = GaussianNB()
        model = bayes.fit(X_train, y_train)
```

```
In [ ]: preds = model.predict(X_test)
        print(f"Accuracy : {accuracy_score(y_test, preds)*100}%")
        confusion_matrix(y_test, preds)
```

Accuracy : 96.66666666666667%

```
Out[ ]: array([[11,  0,  0],
               [ 0,  5,  1],
               [ 0,  0, 13]], dtype=int64)
```