5: Naïve Bayes classifier for a sample data and compute the accuracy

```
from sklearn.datasets import load_iris
iris_dataset = load_iris()
```

store the feature matrix (x) and response vector (y)

```
x = iris_dataset.data
y = iris_dataset.target
```

spliting x and y into training and testing sets

```
from sklearn.model_selection import train_test_split

x_train, x_test, y_train, y_test = train_test_split(x, y)
```

training the model on training set

```
from sklearn.naive_bayes import GaussianNB
gnb  = GaussianNB()

gnb.fit(x_train,y_train)
```

making prediction on the testing set

```
y_pred = gnb.predict(x_test)
```

comparing actual response values(y_test) with prediction response values (y_pred)

```
from sklearn import metrics

percent =  round( metrics.accuracy_score(y_test,y_pred) * 100, 2)

print("Gaussian Naive Bayes model accuracy is {0}%".format(percent) )
```

```
Gaussian Naive Bayes model accuracy is 97.37%
```

```

```