

Import Libraries

```
In [2]: import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.naive_bayes import GaussianNB
from sklearn.metrics import confusion_matrix
from sklearn.metrics import classification_report
```

Loading Dataset Diabetes_RF.csv and define X and y

```
In [8]: d = pd.read_csv('Diabetes_RF.csv')
d.head()
X = d.drop(["Class variable"], axis=1)
y=d["Class variable"]
```

Splitting into Training and testing sets with test size 0.25

```
In [9]: X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.25,random_state=10)
```

Create Naive Bayes model using GaussianNB object

```
In [10]: from sklearn.naive_bayes import GaussianNB
classifier=GaussianNB()
classifier.fit(X_train,y_train)
```

```
Out[10]: GaussianNB(priors=None)
```

Predict the Y with the X_Test values

```
In [11]: y_pred=classifier.predict(X_test)
```

Print Confusion Matrix

```
In [12]: from sklearn.metrics import confusion_matrix
print(confusion_matrix(y_test,y_pred))
```

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[[104  17]
 [ 36  35]]
```

Print classification report

```
In [ ]: print(classification_report(y_test,y_pred))
```