naive_bayes

In [ ]:
```python
from sklearn.datasets import load_iris
```

In [ ]:
```python
iris = load_iris()
```

In [ ]:
```python
import pandas as pd
```

In [ ]:
```python
data = pd.DataFrame(iris.data,columns = iris.feature_names)
```

In [ ]:
```python
data.head()
```

In [ ]:
```python
data['Species'] = pd.DataFrame(iris.target)
```

In [ ]:
```python
data.head()
```

In [ ]:
```python
X = data.iloc[:,:-1]
y = data.iloc[:,-1]
```

In [ ]:
```python
from sklearn.model_selection import train_test_split

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

In [ ]:
```python
from sklearn.naive_bayes import GaussianNB

model = GaussianNB()
```

In [ ]:
```python
model_fit = model.fit(X_train,y_train)
y_pred = model.predict(X_test)
```

In [ ]:
```python
from sklearn.metrics import accuracy_score, confusion_matrix, precision_score, recal
print(confusion_matrix(y_pred,y_test))
print('Accuracy: ',accuracy_score(y_pred,y_test).round(2)*100)
print('Accuracy: ',precision_score(y_pred,y_test,average = 'macro').round(2)*100)
print('Accuracy: ',recall_score(y_pred,y_test,average = 'macro').round(2)*100)
```