cancer dataset

In [1]:
```
from sklearn.datasets import load_breast_cancer
```

In [4]:
```
df=load_breast_cancer()
```

In [5]:
```
x=df.data
```

In [6]:
```
y=df.target
```

In [7]:
```
from sklearn.naive_bayes import GaussianNB
```

In [8]:
```
from sklearn.model_selection import train_test_split
```

In [9]:
```
xtrain,xtest,ytrain,ytest=train_test_split(x,y,test_size=0.25,random_
model=GaussianNB()
model
```

Out[9]:
```
GaussianNB
GaussianNB()
```

In [10]:
```
model.fit(xtrain,ytrain)
```

Out[10]:
```
GaussianNB
GaussianNB()
```

In [11]:
```
prediction=model.predict(xtest)
prediction
```

Out[11]:
```
array([1, 1, 0, 1, 0, 1, 1, 1, 1, 1, 1, 0, 0, 1, 0, 1, 1, 1, 1, 1, 0, 1,
       1, 1, 1, 0, 0, 1, 0, 1, 0, 1, 1, 1, 0, 1, 1, 1, 1, 0, 1, 1, 0, 1,
       0, 1, 0, 0, 1, 0, 0, 0, 1, 1, 1, 0, 1, 0, 0, 1, 0, 1, 1, 1, 1, 0,
       1, 1, 1, 0, 1, 1, 1, 1, 0, 1, 1, 0, 0, 0, 1, 0, 0, 1, 1, 1, 0, 1,
       0, 1, 0, 1, 1, 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
       1, 1, 1, 0, 0, 0, 1, 0, 1, 1, 1, 1, 1, 1, 0, 1, 0, 0, 1, 1, 0, 1,
       1, 0, 0, 1, 1, 1, 0, 0, 0, 1, 0])
```

In [12]:
```
from sklearn.metrics import accuracy_score,confusion_matrix
```

In [13]:
```
accuracy_score(ytest,prediction)
```

Out[13]:
```
0.965034965034965
```

In [14]:
```
confusion_matrix(ytest,prediction)
```

Out[14]:
```
array([[49,  5],
       [ 0, 89]], dtype=int64)
```

```
# Iris dataset
```

In [15]:
```
from sklearn.datasets import load_iris
```

In [16]:
```
dataset=load_iris()
```

In [19]:
```
x1=dataset.data
```

In [20]:
```
y1=dataset.target
```

In [21]:
```
from sklearn .model_selection import train_test_split
x1train,x1test,y1train,y1test=train_test_split(x1,y1,test_size=0.25,r
```

In [22]:
```
from sklearn.naive_bayes import GaussianNB
model1=GaussianNB()
model1
```

Out[22]:
```
GaussianNB()
```

In [23]:
```
model1.fit(x1train,y1train)
```

Out[23]:
```
GaussianNB()
```

In [24]:
```
prediction1=model1.predict(x1test)
prediction1
```

Out[24]:
```
array([0, 0, 0, 1, 0, 0, 0, 0, 1, 0, 2, 2, 1, 1, 1, 0, 1, 1, 2, 1, 0, 1,
       2, 0, 1, 1, 0, 2, 0, 2, 2, 1, 0, 0, 0, 2, 0, 2])
```

In [25]:
```
from sklearn.metrics import accuracy_score,confusion_matrix
accuracy_score (y1test,prediction1)
```

Out[25]:
```
0.9210526315789473
```

In [26]:
```
confusion_matrix (y1test,prediction1)
```

Out[26]:
```
array([[17,  0,  0],
       [ 0, 11,  2],
       [ 0,  1,  7]], dtype=int64)
```

In [ ]:
```

```