

Files

- sample\_data
- diabetes.csv

Disk 84.78 GB available

+ Code + Text

```
import numpy as np
import pandas as pd
df=pd.read_csv('/content/diabetes.csv')
df
```

	Pregnancies	Glucose	BloodPressure	SkinThickness	Insulin	BMI	DiabetesPedigreeFunction	Age	Outcome
0	6	148	72	35	0	33.6	0.627	50	1
1	1	85	66	29	0	26.6	0.351	31	0
2	8	183	64	0	0	23.3	0.672	32	1
3	1	89	66	23	94	28.1	0.167	21	0
4	0	137	40	35	168	43.1	2.288	33	1
...	...	...	...	...	...	...	...	...	...
763	10	101	76	48	180	32.9	0.171	63	0
764	2	122	70	27	0	36.8	0.340	27	0
765	5	121	72	23	112	26.2	0.245	30	0
766	1	126	60	0	0	30.1	0.349	47	1
767	1	93	70	31	0	30.4	0.315	23	0

768 rows x 9 columns



Files

- sample\_data
- diabetes.csv

Disk 84.78 GB available

```
from sklearn.model_selection import train_test_split
x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=.30,random_state=1)
y_test

array([0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 1, 0, 1, 1, 0, 0, 0, 1, 1,
       1, 1, 0, 0, 0, 1, 0, 1, 1, 0, 0, 1, 0, 1, 0, 0, 0, 0, 0, 0, 0, 1,
       0, 0, 1, 1, 0, 1, 0, 0, 1, 0, 1, 0, 1, 0, 0, 0, 0, 0, 1, 0, 1, 0,
       1, 1, 0, 1, 1, 0, 0, 0, 1, 1, 1, 0, 0, 1, 1, 0, 1, 1, 0, 0, 1, 0,
       0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 1, 0, 0, 0, 1, 0, 0, 0, 1, 0, 1, 0,
       1, 0, 0, 0, 1, 0, 0, 1, 0, 1, 0, 1, 1, 0, 0, 0, 0, 1, 0, 0, 1, 0,
       1, 0, 0, 0, 0, 0, 1, 0, 1, 0, 0, 1, 1, 1, 0, 0, 1, 0, 0, 1, 0, 0,
       1, 1, 0, 0, 0, 0, 1, 1, 0, 0, 1, 0, 1, 1, 0, 0, 1, 1, 0, 0, 1, 0,
       1, 0, 0, 0, 1, 0, 0, 1, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 1, 0, 0, 0,
       1, 1, 1, 0, 0, 0, 1, 1, 0, 0, 0, 1, 0, 0, 1, 1, 0, 1, 1, 0, 0, 1,
       0, 0, 0, 1, 1, 0, 0, 0, 0, 1, 1])
```

```
[5] from sklearn.preprocessing import StandardScaler
scaler=StandardScaler()
scaler.fit(x_train)
x_train=scaler.transform(x_train)
x_test=scaler.transform(x_test)
x_test

array([[ 0.96714133,  0.48047259,  0.25121172, ..., -0.76147848,
         0.53734346,  1.47930079],
       [-0.82270897,  0.96100484, -0.44543516, ..., -0.74843705,
        -0.86878331, -0.94617312],
       [ 0.66883295, -0.38448546, -0.44543516, ..., -0.89189275,
```



Files

- sample\_data
- diabetes.csv

Disk 84.78 GB available

```
[5] [-0.66876351, -0.94017512],  
[ 0.66883295, -0.38448546, -0.44543516, ..., -0.89189275,  
-0.78766061, -0.52798796],  
...,  
[-0.82270897, -0.96112415, -0.74399811, ..., -0.8658099 ,  
-0.70353337, -0.86253609],  
[ 1.86206648, 1.50560806, 0.25121172, ..., 0.80349276,  
0.20684358, 0.05747126],  
[ 1.5637581 , -0.28837901, 0.64929565, ..., 0.30791853,  
-0.62541522, 0.22474532]])  
  
[6] from sklearn.svm import SVC  
classifier=SVC()  
classifier.fit(x_train,y_train)  
y_pred=classifier.predict(x_test)  
y_pred  
  
array([0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 1, 0, 1, 0, 0, 0, 0, 1, 0,  
1, 0, 0, 0, 0, 1, 0, 1, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,  
0, 0, 1, 1, 0, 0, 0, 0, 1, 0, 1, 0, 1, 0, 0, 0, 1, 0, 1, 0, 0, 0,  
0, 0, 1, 1, 1, 1, 1, 0, 1, 0, 1, 0, 0, 1, 1, 0, 0, 0, 0, 1, 0, 0,  
0, 0, 0, 0, 0, 0, 1, 1, 0, 0, 1, 0, 0, 0, 1, 0, 0, 0, 1, 0, 0, 0,  
0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 1, 0,  
0, 0, 0, 0, 0, 1, 0, 0, 1, 0, 0, 1, 1, 0, 0, 0, 0, 0, 0, 1, 0, 0,  
1, 1, 0, 0, 0, 0, 1, 1, 0, 0, 0, 0, 0, 1, 1, 1, 1, 1, 0, 0, 1, 0,  
1, 0, 0, 0, 1, 0, 1, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0,  
0, 1, 1, 0, 0, 0, 1, 1, 0, 0, 0, 1, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0,  
0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 1, 0])
```

Files

- sample\_data
- diabetes.csv

Disk 84.78 GB available

```
from sklearn.metrics import classification_report, accuracy_score, confusion_matrix
# result=confusion_matrix(y_test,y_pred)
score=accuracy_score(y_test,y_pred)
score
report=classification_report(y_pred,y_test)
print(report)
```

	precision	recall	f1-score	support
0	0.92	0.79	0.85	170
1	0.58	0.80	0.67	61
accuracy			0.79	231
macro avg	0.75	0.80	0.76	231
weighted avg	0.83	0.79	0.80	231