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Code

JupyterLab Python 3 (ipykernel)

[26]:
```
import pandas as p #data manupilation
import warnings as w#remove minor/files warnings
w.filterwarnings('ignore')
from sklearn.model_selection import train_test_split #Scikit- learn ML models  not changeablle
from sklearn.linear_model import LogisticRegression
from sklearn.metrics import classification_report,accuracy_score
```

[27]:
```
df= p.read_csv("Testing.csv")
df
```

[27]:

	Pregnancies	Glucose	BloodPressure	SkinThickness	Insulin	BMI	DiabetesPedigreeFunction	Age	Outcome
0	9	120	72	22	56	20.8	0.733	48	0
1	1	71	62	0	0	21.8	0.416	26	0
2	8	74	70	40	49	35.3	0.705	39	0
3	5	88	78	30	0	27.6	0.258	37	0
4	10	115	98	0	0	24.0	1.022	34	0
...	...	...	...	...	...	...	...	...	...
303	10	101	76	48	180	32.9	0.171	63	0
304	2	122	70	27	0	36.8	0.340	27	0
305	5	121	72	23	112	26.2	0.245	30	0
306	1	126	60	0	0	30.1	0.349	47	1
307	1	93	70	31	0	30.4	0.315	23	0

308 rows × 9 columns

[28]:
```
y= df['Outcome']
y
```

[28]:
```
0      0
1      0
2      0
3      0
4      0
      ..
303    0
304    0
305    0
306    1
307    0
Name: Outcome, Length: 308, dtype: int64
```

[29]:
```
x = df.drop('Outcome',axis=1)
x
```

[29]:

	Pregnancies	Glucose	BloodPressure	SkinThickness	Insulin	BMI	DiabetesPedigreeFunction	Age
0	9	120	72	22	56	20.8	0.733	48
1	1	71	62	0	0	21.8	0.416	26
2	8	74	70	40	49	35.3	0.705	39
3	5	88	78	30	0	27.6	0.258	37
4	10	115	98	0	0	24.0	1.022	34
...	...	...	...	...	...	...	...	...
303	10	101	76	48	180	32.9	0.171	63
304	2	122	70	27	0	36.8	0.340	27
305	5	121	72	23	112	26.2	0.245	30
306	1	126	60	0	0	30.1	0.349	47
307	1	93	70	31	0	30.4	0.315	23

308 rows × 8 columns

[30]:
```
x_train,x_test,y_train,y_test = train_test_split(x,y,test_size=0.25)
```

[31]:
```
model =LogisticRegression()#apply algo
model.fit(x_train,y_train) #fitting model
p = model.predict(x_test) #predicting feature data %
```

[32]:
```
accuracy_score(p,y_test)*100
```

[32]:
```
85.71428571428571
```

[33]:
```
print(classification_report(y_test,p))
```

```
              precision    recall  f1-score   support

           0       0.90      0.92      0.91        59
           1       0.71      0.67      0.69        18

    accuracy                           0.86        77
   macro avg       0.80      0.79      0.80        77
weighted avg       0.85      0.86      0.86        77
```

[ ]: