In [1]:
```
import pandas as pd
import numpy as np
from sklearn.linear_model import LogisticRegression
```

In [3]:
```
dia=pd.read_excel("/content/drive/MyDrive/Colab Notebooks/panda/Document from
dia.head()
```

Out[3]:

	preg	plas	pres	skin	insu	mass	pedi	age	class
0	6	148	72	35	0	33.6	0.627	50	tested_positive
1	1	85	66	29	0	26.6	0.351	31	tested_negative
2	8	183	64	0	0	23.3	0.672	32	tested_positive
3	1	89	66	23	94	28.1	0.167	21	tested_negative
4	0	137	40	35	168	43.1	2.288	33	tested_positive

In [5]:
```
dia.isnull().sum()
```

Out[5]:

	0
preg	0
plas	0
pres	0
skin	0
insu	0
mass	0
pedi	0
age	0
class	0

dtype: int64

In [6]:
```
ind=dia[['age','mass','insu','plas']]
dep=dia['class']
```

In [8]:
```
Logr=LogisticRegression()
Logr.fit(ind,dep)
```

Out[8]:

▾ LogisticRegression

LogisticRegression()

In [9]:
```
age=int(input("enter age:"))
mass=int(input("enter mass:"))
insulin=int(input("enter the insulin level:"))
plasma=int(input("enter the plasma level:"))
pred=Logr.predict([[age,mass,insulin,plasma]])
print(pred)
```

```
enter age:23
enter mass:78
enter the insulin level:99
enter the plasma level:32
['tested_negative']
/usr/local/lib/python3.12/dist-packages/sklearn/utils/validation.py:2739: UserW
arning: X does not have valid feature names, but LogisticRegression was fitted
with feature names
  warnings.warn(
```

In [10]:
```
Logr.score(ind,dep)
```

Out[10]:
```
0.7669270833333334
```

In [11]:
```
from sklearn.metrics import accuracy_score
pval=Logr.predict(ind)
accuracy_score(dep,pval)
```

Out[11]:
```
0.7669270833333334
```