```
import pandas as pd
import matplotlib.pyplot as plt
from sklearn.model_selection import train_test_split
```

+ Code + Text

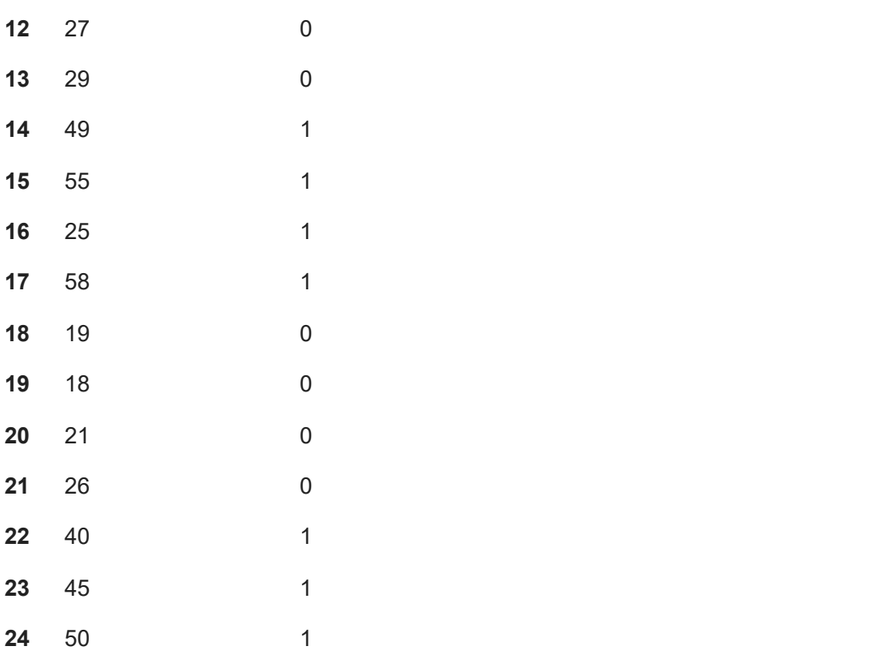
```
df=pd.read_csv('/content/logistic.csv')
```

```
df
```

	age	bought_insurance
0	22	0
1	25	0
2	47	1
3	52	0
4	46	1
5	56	1
6	55	0
7	60	1
8	62	1
9	61	1
10	18	0
11	28	0
12	27	0
13	29	0
14	49	1
15	55	1
16	25	1
17	58	1
18	19	0
19	18	0
20	21	0
21	26	0
22	40	1
23	45	1
24	50	1
25	54	1
26	23	0

```
plt.scatter(df.age,df.bought_insurance,marker='+')
```

```
<matplotlib.collections.PathCollection at 0x7d3ddcfb3c40>
```




```
x_train,x_test,y_train,y_test=train_test_split(df[['age']],df[['bought_insurance']],test_size= 0.2)
```

```

```

```
x_test
```

	age
4	46
9	61
15	55
0	22
25	54
22	40

```
from sklearn.linear_model import LogisticRegression
```

```
model=LogisticRegression()
```

```
x_train
```

```
10    18
11    28
19    18
23    45
26    23
4     46
8     62
14    49
1     25
22    40
24    50
2     47
17    58
6     55
3     52
9     61
16    25
25    54
20    21
5     56
18    19
Name: age, dtype: int64
```

```
model.fit(x_train,y_train)
```

```
/usr/local/lib/python3.10/dist-packages/sklearn/utils/validation.py:1143: DataConversionWarning: A column-vector y was passed when a 1d array was expected. Please change the shape of y to
  y = column_or_1d(y, warn=True)
```

LogisticRegression()

```
model.predict([[42]])
```

```
/usr/local/lib/python3.10/dist-packages/sklearn/base.py:439: UserWarning: X does not have valid feature names, but LogisticRegression was fitted with feature names
  warnings.warn(
array([1])
```