

```
import pandas as pd
import numpy as np
from sklearn.model_selection import train_test_split
from sklearn.preprocessing import StandardScaler
from sklearn.linear_model import LogisticRegression
from sklearn.metrics import confusion_matrix
```

```
from google.colab import drive
drive.mount('/content/drive')
```

Mounted at /content/drive

```
file_path='/content/drive/My Drive/machine learning/suv_data_ml.csv'
df=pd.read_csv(file_path)
print(df.head())
```

	User ID	Gender	Age	EstimatedSalary	Purchased
0	15624510	Male	19	19000	0
1	15810944	Male	35	20000	0
2	15668575	Female	26	43000	0
3	15603246	Female	27	57000	0
4	15804002	Male	19	76000	0

```
X = df[['Age', 'EstimatedSalary']]
y = df['Purchased']
```

```
X_train, X_test, y_train, y_test = train_test_split(X, y,
test_size=0.2, random_state=0)
```

```
scaler = StandardScaler()
X_train_scaled = scaler.fit_transform(X_train)
X_test_scaled = scaler.transform(X_test)
```

```
model = LogisticRegression()
```

```
LogisticRegression(random_state=0)
```

```
LogisticRegression(random_state=0)
```

```
model.fit(X_train_scaled, y_train)
y_pred = model.predict(X_test_scaled)
```

```
cm = confusion_matrix(y_test, y_pred)
tn, fp, fn, tp = cm.ravel()
print(cm)
print("TN:", tn)
print("FP:", fp)
print("FN:", fn)
print("TP:", tp)
```

```
[[57  1]
 [ 5 17]]
```

TN: 57  
FP: 1  
FN: 5  
TP: 17

```
print("Test Accuracy:", model.score(X_test_scaled, y_test))  
print("Training Accuracy:", model.score(X_train_scaled, y_train))
```

Test Accuracy: 0.925  
Training Accuracy: 0.821875