

bank_market.py 3



C:\> Users > Deeksha > bank_market.py > ...

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1 import pandas as pd
2 from sklearn.model_selection import train_test_split
3 from sklearn.linear_model import LogisticRegression
4 from sklearn.metrics import accuracy_score, precision_score, recall_score
5 data = pd.read_csv('https://drive.google.com/uc?export=download&id=1MysWWjMWLXF-c4EbAmDk3t80V0BE6sLT')
6 print(data.head())
7 print(data.describe())
8 X = data.drop('y', axis=1)
9 y = data['y']
10 X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)
11 model = LogisticRegression()
12 model.fit(X_train, y_train)
13 y_pred = model.predict(X_test)
14 accuracy = accuracy_score(y_test, y_pred)
15 precision = precision_score(y_test, y_pred)
16 recall = recall_score(y_test, y_pred)
17 print(f'Accuracy: {accuracy}')
18 print(f'Precision: {precision}')
19 print(f'Recall: {recall}')
20
21
```

```

>> age      job marital ... campaign pdays y
>> 0      59  blue-collar married ...      2    999  0
>> 1      56   housemaid married ...      1    999  0
>> 2      41   technician single ...      1    999  0
>> 3      55  blue-collar married ...      2    999  0
>> 4      54    retired married ...      2    999  0
>>
>> [5 rows x 17 columns]
>>
>>          age      campaign      pdays      y
>> count  41188.000000  41188.000000  41188.000000  41188.0
>> mean    40.936207    2.763841    962.475454    0.1
>> std     10.618762    3.098021    186.910907    0.3
>> min     17.000000    1.000000     0.000000    0.0
>> 25%     33.000000    1.000000    999.000000    0.0
>> 50%     39.000000    2.000000    999.000000    0.0
>> 75%     48.000000    3.000000    999.000000    0.0
>> max     98.000000    63.000000    999.000000    1.0
>> Accuracy: 0.9116485355648535
>> Precision: 0.4285714285714285
>> Recall: 0.6666666666666666
>>

```