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In [ ]: 1 import numpy as np
        2 import pandas as pd
        3 import matplotlib.pyplot as plt
        4 import seaborn as sns
        5 from sklearn.linear_model import LinearRegression
        6 from sklearn.model_selection import train_test_split
        7 from sklearn import metrics
        8 from sklearn.linear_model import LogisticRegression
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In [ ]: 1 data = pd.read_csv("social.csv")
        2 data.head()
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In [ ]: 1 data['Purchased'].value_counts()
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In [ ]: 1 X = data['Age']
        2 y = data['Purchased']
```

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In [ ]: 1 X_train,X_test,y_train,y_test = train_test_split(X,y,test_size=0.2,random_s
```

```
In [ ]: 1 print("X_train : ",X_train.shape)
        2 print("X_test : ",X_test.shape)
        3 print("y_train : ",y_train.shape)
        4 print("y_test : ",y_test.shape)
```

```
In [ ]: 1 X_train = X_train.values.reshape(X_train.shape[0],1)
        2 X_test = X_test.values.reshape(X_test.shape[0],1)
        3 y_train = y_train.values.reshape(y_train.shape[0],1)
        4 y_test = y_test.values.reshape(y_test.shape[0],1)
```

```
In [ ]: 1 print("X_train : ",X_train.shape)
        2 print("X_test : ",X_test.shape)
        3 print("y_train : ",y_train.shape)
        4 print("y_test : ",y_test.shape)
```

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In [ ]: 1 lr = LogisticRegression()
        2 lr.fit(X_train,y_train)
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In [ ]: 1 y_pred = lr.predict(X_test)
        2 y_pred
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In [ ]: 1 accuracy = lr.score(X_test,y_test)
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In [ ]: 1 accuracy
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In [ ]: 1
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