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Class: MSc Computer Science

Subject: Machine Learning in Finance

 Topic: Lab Logbook Week 3

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```python
#Lab Logbook Week 3
# Question Number 1
import pandas as pd
import matplotlib.pyplot as plt

df = pd.read_csv("telecom_churn.csv")
```

```python
# SID = 2463693
col_3 = df.columns[2]
col_9 = df.columns[8]
print(f"Selected columns based on SID 2463693:")
print(f"   → 3rd column: {col_3}")
print(f"   → 9th column: {col_9}\n")
```

```
Selected columns based on SID 2463693:
   → 3rd column: Area code
   → 9th column: Total day charge
```

```python
plt.figure(figsize=(8, 6))
plt.scatter(df[df['Churn'] == False][col_3],
            df[df['Churn'] == False][col_9],
            label='No Churn', alpha=0.6)


plt.scatter(df[df['Churn'] == True][col_3],
            df[df['Churn'] == True][col_9],
            label='Churn', alpha=0.6)
```