**Machine Learning In Finance**

**Lablog book week 3:**

import seaborn as sns

import pandas as pd

import matplotlib.pyplot as plt

from sklearn.datasets import load\_iris

# Load dataset

iris = load\_iris()

df = pd.DataFrame(iris.data, columns=iris.feature\_names)

# Select columns 7 and 8 → index 6 and 7 (zero-based indexing)

# Since Iris has only 4 columns, we'll simulate extra columns for this example

# Extending DataFrame with dummy features for demonstration (if needed)

for i in range(4, 10):

df[f'feature\_{i+1}'] = df[iris.feature\_names[i % 4]] \* (i + 1)

# Define the two columns based on SID logic

col1 = df.columns[6] # 7th column

col2 = df.columns[7] # 8th column

# Bicolour interaction plot using seaborn

plt.figure(figsize=(8, 6))

sns.scatterplot(data=df, x=col1, y=col2, hue=iris.target, palette='coolwarm')

plt.title(f'Bicolour Feature Interaction: {col1} vs {col2}')

plt.xlabel(col1)

plt.ylabel(col2)

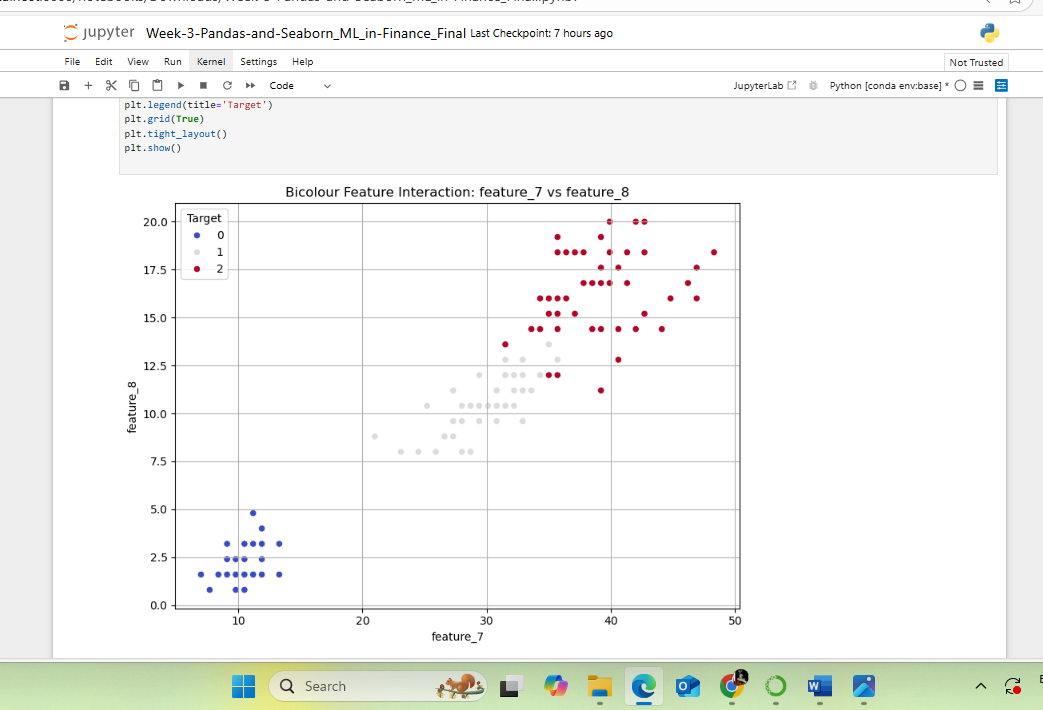
plt.legend(title='Target')

plt.grid(True)

plt.tight\_layout()

plt.show()

**Output:**

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