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ASSIGNMENT - WEEK 1

CODE -

The screenshot shows a Jupyter Notebook interface with the following details:

- Title Bar:** jupyter Week1-LinearRegression_tensorflow-St_2026 Last Checkpoint: 37 minutes ago
- Toolbar:** File Edit View Run Kernel Settings Help Trusted
- Code Cell:** [49]:

```
import numpy as np
import matplotlib.pyplot as plt

x = np.linspace(0, 10, 20)
y = 2.5 * x + 5 + np.random.normal(0, 3, size=len(x))

coeffs = np.polyfit(x, y, 1)
y_fit = np.polyval(coeffs, x)

plt.figure(figsize=(7, 5))
plt.scatter(x, y, color='purple', s=70)
plt.plot(x, y_fit, color='orange', linewidth=3)
plt.show()
```
- Output:** Lab Logbook requirements:
Please make sure to document the following in your Lablogbook:
Include an image of the generated graph depicting the original data and the fitted line for linear regression. Modify the appearance of the graph by adjusting its color or size, making it different from the graph of your classmates. Copy the figure and paste it directly into your logbook. Refrain from taking a snapshot; instead, right-click and copy the graph to your lab logbook. Ensure that no code or other information is added to the logbook and that only required graph is present.
Marks will not be awarded if anything else is found in the logbook or instructions are not clearly followed.

OUTPUT -

