EXP-26

Aim: To write a python program to create max multiple plots

psendocode:

* import the matplotlib.pyplot for plotting
* create datasets for each subject
* use plt.subplot() to create a grid layout and define the no of rows and columns
* Display layout and plot

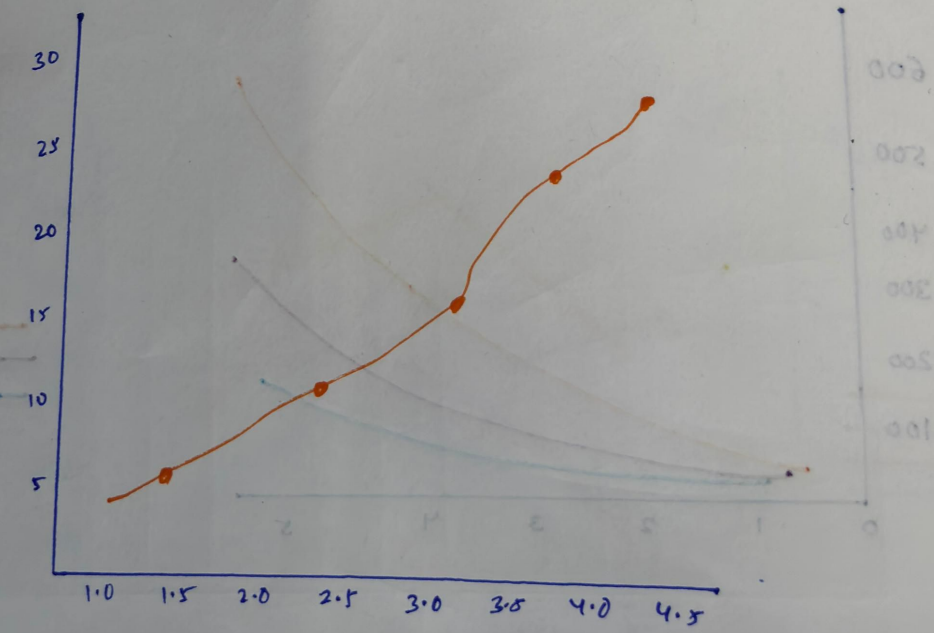
sample input:

$x = [1, 2, 3, 4, 5]$

$y = x^2 = [1, 4, 9, 16, 25]$

$y = x^3 = [1, 8, 27, 64, 125]$

Sample output:



Result:

These code has been executed successfully and so t

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

x = np.linspace(0, 10, 100)
y1, y2, y3, y4 = np.sin(x), np.cos(x), np.tan(x), np.exp(-x)

fig, axs = plt.subplots(2, 2, figsize=(10, 8))
axs[0, 0].plot(x, y1, color='blue'), axs[0, 0].set_title('Sine')
axs[0, 1].plot(x, y2, color='green'), axs[0, 1].set_title('Cosine')
axs[1, 0].plot(x, y3, color='red'), axs[1, 0].set_title('Tangent')
axs[1, 1].plot(x, y4, color='purple'), axs[1, 1].set_title('Exponential Decay')

plt.tight_layout(), plt.show()
```