

## Assignment 1

**Write a program in python to represent a line graph where x and y value will be user inputs.**

```
In [ ]: import matplotlib.pyplot as plt
import numpy as np
```

```
In [2]: x_input = input("Enter a list of x values separated by spaces: ")
# Remove commas and split the string into a list of values
x_values = [float(val) for val in x_input.replace(',', ' ').split()]
```

Enter a list of x values separated by spaces: -5 , 0 , 5

```
In [3]: y_input = input("Enter a list of y values separated by spaces: ")
# Remove commas and split the string into a list of values
y_values = [float(val) for val in y_input.replace(',', ' ').split()]
```

Enter a list of y values separated by spaces: -9 , -7 , -5

```
In [5]: plt.plot(x_values, y_values)
plt.xlabel('X')
plt.ylabel('Y')
plt.title('Line Graph')
plt.grid(True)
plt.show()
```

