Name: _____   **Total Marks :30**

Roll No. :

Instructions:

- Take the screen shots of all your tasks and their outputs and make a single pdf file.
- Upload the single file in pdf format on google classroom.
- Also upload the ipynb or text file that contains the code

Lab Task 5:

1. Write a Python program that computes the velocity and acceleration functions of a particle whose position on the x axis is given by

$$x = 4 - 27t + t^3$$

Assume t and x are in meters.

2. Make a custom functions in python that takes two inputs initial velocity and angle and computes height and range of projectile motion.

3. Write a python program that calculates the Coulombs force between two point charges. Take 3 possible sets of inputs to show the relation of force with magnitude of charge and distance.