	Bismillahir Rahmanir Rahim  International Islamic University Chittagong  Department of Computer Science & Engineering  Lab Assignment - 4
	CSE 4746 Numerical Methods
1.	Write a program to find the least square line $y = a + bx$ for the following data $x -2 -1 0 1 2$ $y 1 2 3 4 5$
2.	Write a program to find the least square parabola $y = a + bx + cx^2$ for the following data $x + 2 + 4 + 6 + 8$ $y + 1.4 + 2.0 + 2.4 + 2.8$
3.	Write a program to find the best possible values of a and b from the relation $y = ae^{bx}$ for the following data: $ \begin{array}{cccccccccccccccccccccccccccccccccc$
4.	Write a program to solve the following Differential Equation by using Euler's method. dy / dx = $x^3 + y$ , y (0) = 1. Compute y (0.02) taking h = 0.01.
5.	Write a program to solve the following Differential Equation by using Runge – Kutta method. $dy / dx = x + y$ , $y(0) = 1$ . Compute $y(0.1)$ and $y(0.2)$ taking $h = 0.1$ .