

s		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:					
	x	2	10	26	61	
	y	600	500	400	350	
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 $h = 0.1$.					