

**MATH 609-600 Numerical Analysis**  
**Programming assignment #4**  
**Polynomial and spline interpolation**

This assignment is worth of 100 pts. Delay is penalized by 5 pts per day.

1. SPECIFICATIONS

- (1) Write your own program for: (i) polynomial interpolation of data; (ii) natural cubic spline for interpolation of data.
- (2) Report the computed solutions and compare the results obtained by the two different methods for the data given below. For the report use the guidelines provided by your TA.

x	0.9	1.3	1.9	2.1	2.6	3.0	3.9	4.4	4.7	5.0	6.0	7.0	8.0	9.2	10.5	11.3	11.6	12.0	12.6	13.0
y	1.3	1.5	1.85	2.1	2.6	2.7	2.4	2.15	2.05	2.1	2.25	2.3	2.25	1.95	1.4	0.9	0.7	0.6	0.5	0.4