Homework Assignment 9 Due on Friday 12/7

Programming Problems:

1. Bonus Problem. Add 1 point in final grade. Write a Matlab code that evaluates P'(x), where P(x) is the interpolating polynomial given in the Newton form. Your code should take $x, \{x_i, a_i\}$ as input data, where $a_i = f[x_0, x_1, \ldots, x_i]$, and output P'(x). Here x should be assigned as an array and output an array P'(x).

Save your code as function M-file and submit it to num_ana@math.nthu.edu.tw

Writing Problems:

Do the following exercise problems in the text book by Bradie, Sec 6.2: 4^* , 5^* , 6^* , 8^* , 9^* , 12, 13 Sec 6.3: 2, 4^* , 5, 8^* , 9^* , 11

We only discuss * problems in discussion section.