Homework Assignment 7
Due on Friday 11/16

Programming Problems:

1. Write a Matlab code that evaluates $P(x)$ in the Newton form for give x. 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 $P_n(x)$. Here x should be assigned as an array and output an array $P(x)$. Use the algorithm listed on page 364 to compute $P(x)$.

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 5.4: 1*, 2*, 3*, 4*, 9, 11, 13

Sec 5.5: 2, 3, 10*

You may use your code to do 9, 11, 13 in Sec 5.4. **Please provide the intermediate steps and results to show how you get the final answer instead of giving it only**.

We only discuss * problems in discussion section.