## 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 $P^{\prime}(x)$, where $P(x)$ is the interpolating polynomial given in the Newton form. Your code should take $x,\left\{x_{i}, a_{i}\right\}$ as input data, where $a_{i}=f\left[x_{0}, x_{1}, \ldots, x_{i}\right]$, and output $P^{\prime}(x)$. Here $x$ should be assigned as an array and output an array $P^{\prime}(x)$.

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.

