Lab 2 - Linked Lists

Problem 1. We want to manage a list of students. Information of each student consists of the following fields: name, date of birth (day, month, year), math mark, physic mark, language mark. Write a program solving the following requirements using singly linked list:

a) Input n students' information.
b) Print out the student list.
c) Add a new student to the list.
d) Count the number of students in a given year of birth.
e) Check if a student name x exists in the list or not.
f) Delete a student from the list by a given name x.
g) Find the student(s) having the biggest average of math, physic and language marks.
h) Print the list of students whose math mark is less than 5.
i) Write the student list to a file named StudentList.txt.

Problem 2. A polynomial is represented as follows:

```
struct node
{
        int num;
        int coeff;
        struct node *next;
};
```

Write a program to store a polynomial using linked list and the following functions:

a) Input a polynomial and store it in a linked list.
b) Print the polynomial.
c) Perform addition on two polynomials.
d) Perform subtraction on two polynomials.