Please design a personal information manage program, the program must include these function

A. Add a new data (25%)
B. Delete a data (25%)
C. Search for specific information (25%)
D. Modify specific data (25%)
E. Let user select the function multiple times or select the end program (10%)

You should use the following structure to implement

```
struct PersonalInfo
{
    int ID;
    char* name;
    int age;
    int gender; // 1=male，2=female
    int birthday[3]; //birthday[0]=year、birthday[1]=month、birthday[2]=day
    personalInfo* LeftChild; // Left child node of the binary search tree
    personalInfo* RightChild; // Right child node of the binary search tree
}
```

The functional aspects are as follows

A. Add a new data

   Program need to read data from a text file, and save all data to a binary search tree. After reading data, you should let user input a new data (including ID, name, age, gender, birthday) and add the new data to binary search tree. Finally write all data to file.

B. Delete a data

   Program need to read data from a text file, and save all data to a binary search tree. After reading data, you should let user input ID that you want to delete, and delete that data. Finally write data to file (sort by ID).

C. Search for specific information

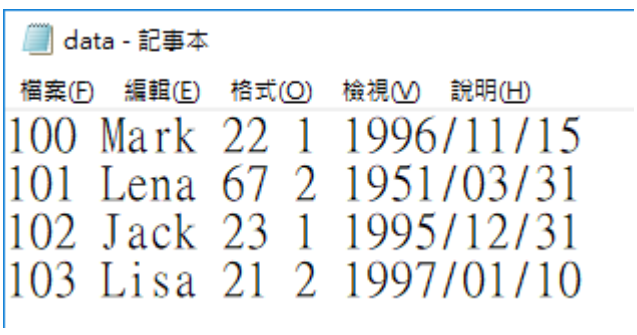
   Program need to read data from a text file, and save all data to an array. After reading data, you should let user input the field that user want to search, and input the value of that field. If a data match, output the data information, otherwise, output “Not found\n.”

D. Modify specific data

   Program need to read data from a text file, and save all data to a binary search tree. After reading data, you should let user input ID that you want to modify data. If the ID exist, let user input new data (including ID, name, age, gender, birthday), and write data to file.

➢ Note that this program requires the user to select the function and operate it multiple times, and let user select to exit the program.

The contents of the file are as follows (ID, name, age, gender, date of birth from left to right)



Output example

```
1. Add
2. Delete
3. Search
4. Modify
5. Exit
? 1
Please input new data
ID: 100
Name: Mark
Age: 22
Gender: 1
Birthday: 1996 11 15
1. Add
2. Delete
3. Search
4. Modify
5. Exit
? 2
Please input ID
ID: 103
Data deleted
1. Add
2. Delete
3. Search
4. Modify
5. Exit
? 3
Please input field to search (1.ID 2.Name 3.Age 4.Gender 5.Birthday): 2
Please input name: Mark
ID: 100
Name: Mark
Age: 22
Gender: 1
Birthday: 1996/11/15
1. Add
2. Delete
3. Search
4. Modify
5. Exit
? 4
Please input data ID: 100
Please input new data
ID: 100
Name: Mary
Age: 23
Gender: 2
Birthday: 1995 1 2
1. Add
2. Delete
3. Search
4. Modify
5. Exit
? 5

--------------------------------
Process exited after 61.75 seconds with return value 0
請按任意鍵繼續 . . .
```