## **Structures - Lab Exercise**

Write a program to maintain a database of up to 10 library books. Use the typedef "BOOK" to define a synonym for the library book type.

- 1) Declare any constants, variables or pointers that you need.
- 2) Declare a library book structure which contains the following members:
  - a. A book number which is a long
  - b. A book title which can be up to 30 characters in length
  - c. An author which can be up to 25 characters in length
  - d. A price which is a double
- 3) Initialise the array of book structures by placing a "0" in the book number of each array element.
- 4) Write an add\_book function which reads in the book member details in to the next available array element (with 0 as the ISBN number). This function has one argument which is a pointer to the first element in the book array and it does not return anything.
- 5) Write a display\_book function which searches through the array for the ISBN number entered by the user and displays that book's member details within the function. This function has one argument which is a pointer to the first element in the book array and it does not return anything.
- 6) Modify the program to include a menu which allows you to
  - a. Search the number of a book and display its member details.
  - b. Add a new book to the array as long as there is space available in the array.
  - c. Edit a books price if it changes. (A new function edit\_book)
  - d. Exit on "-1"