

Assignment 11

1. Create a structure to specify data on students given below:

Roll number, Name, Department, Course, Year of joining

Assume that there are not more than 450 students in the college.

- a) Write a function to print names of all students who joined in a particular year.
 - b) Write a function to print the data of a student whose roll number is received by the function.
2. Create a structure called library to hold accession number, title of the book, author name, price of the book, and flag indicating whether book is issued or not. Write a menu-driven program that implements the working of a library. The menu options should be:
 1. Add book information
 2. Display book information
 3. List all books of given author
 4. List the title of specified book
 5. List the count of books in the library
 6. List the books in the order of accession number
 7. Exit
 3. There are five players from which the Most Valuable Player (MVP) is to be chosen. Each player is to be judged by 3 judges, who would assign a rank to each player. The player whose sum of ranks is highest is chosen as MVP. Write a C program to implement this scheme.
 4. Complex numbers are those numbers that can be expressed in the form of " $a + ib$ " where a and b are the real numbers and i is the imaginary part with value $\sqrt{-1}$. Write a C program to add two complex numbers.

Example of Adding Two Complex Number

Input:

$a = (2 + 3i)$

$b = (4 + 5i)$

Output:

$\text{Sum} = (6 + 8i)$

5. Write a program to read a file and display its contents along with line numbers before each line.
6. Write a program to append the contents of one file at the end of another.
7. Write a program to copy contents of one file to another. While doing so replace all lowercase characters to their equivalent uppercase characters.