Algorithm Development and Programming Fundamentals
MCA SEM-1

Pointers and File I/O

1. Define a structure which has members that include name, idno and marks. Write a C program to read the information about N students and print the name and idno of the students having marks less then M. Make use of pointer to structure
2. Write a C program that takes a Student structure. The program should store marks of 5 subjects and calculate total and percentage. Display each subject's marks, total and percentage for all students. Make use of pointer to structure
3. Write a C program to create a number variable. Create a pointer variable for this number variable. Create another pointer-to-pointer variable. Display the address and value of all the variables including pointer variables.
4. Write a C program to create an array of 15 elements. create a pointer which points to an array. Now print the base address of the array. Then display the array elements using pointer arithmetic.
5. Write a program to create a value array and another pointer array. Both array sizes should be 5. Now store some values in the value array. Then store the address of these five elements in the pointer array. Then print the address and value of each of the pointer arrays.
6. Write a C program to swap 2 numbers using pass by value and pass by reference to a function.
7. Write a C program for Writing and reading a string (character by character) into a File.
8. Write a C program to read N integer numbers from the keyboard and store them on a file named OddEven.txt.
   Now read from the file OddEven.txt, separate even and odd numbers and store them into file Even.txt and Odd.txt respectively. Display contents of all the three files.
9. Read N number from keyboard, store them in file Unsort.txt. Sort all the contents of Unsort.txt and store into Sort.txt. Display contents of both these files.