PRACTICAL NUMBER 5

C PROGRAMMING

//a. Write a program to print rollno and names of 10 students using array.

```c
#include <stdio.h>

int main(void) {
 int rollno[10], i;
 char  name[10][50];

 for (i = 0; i < 10; i++)
 {
   printf("\n Enter Roll of Student [%d]", i + 1);
   scanf("%d", & rollno[i]);
   printf("\n Enter Name of Student [%d]", i + 1);
   scanf("%s", & name[i]);
 }

 printf("\nDisplay Roll number and Name :");
 for (i = 0; i < 10; i++)
 {
   printf("\n Roll No :  %d   Name : %s", rollno[i], name[i]);
 }

 return 0;
}
```

```c
/*b. Write a program to sort the elements of array in
descending order*/

#include <stdio.h>
 int main()
{
   //Initialize array
   //int arr[] = {5, 2, 8, 7, 1};
         int length;

         //Enter the length of array
   printf("Enter the length of array : ");
   scanf("%d",&length);

         int arr[length];
   int temp = 0,i,j;

         //Entering elements of array
         printf("Enter elements of an array : ");
         for (i = 0; i < length; i++) {
      scanf("%d", &arr[i]);
   }

   //Displaying elements of original array
   printf("Elements of original array: \n");
   for (i = 0; i < length; i++) {
```

```c
        printf("%d ", arr[i]);
    }


    //Sort the array in descending order
    for (i = 0; i < length; i++) {
        for (j = i+1; j < length; j++) {
            if(arr[i] < arr[j]) {
                temp = arr[i];
                arr[i] = arr[j];
                arr[j] = temp;
            }
        }
    }
    printf("\n");
    //Displaying elements of array after sorting
    printf("Elements of array sorted in descending order: \n");
    for (i = 0; i < length; i++) {
        printf("%d ", arr[i]);
    }
    return 0;
}
```