

**PROGRAM 1:** Develop a C program to copy one string to another string and find its length without using built in functions.

### Input:

```
#include<stdio.h>

#include<conio.h>

#include<string.h>

int main()
{
    char s1[1000], s2[1000];

    int i;

    clrscr();

    printf("\n enter the string: ");

    gets(s1);

    for(i=0; s1[i]!='\0'; i++)
    {
        s2[i]=s1[i];
    }

    printf("\n original string = '%s'", s1);

    printf("\n copied string = '%s'", s2);

    for(i=0; s1[i]!='\0'; ++i);

    printf("\n length of original string = %d", i);

    getch();

    return (0);
}
```

### Output:

```
enter the string: ANVITA

original string = 'ANVITA'
copied string = 'ANVITA'
length of original string = 6_
```

**PROGRAM 2:** Develop a C program to create student structure, read two student details (Student roll number, name, section, department, fees, and results i.e., total marks obtained) and print the student details who has scored the highest.

**Input:**

```
#include <stdio.h>

#include <conio.h>

struct student
{
    int rollno;
    char name[30];
    char sec[30];
    char dept[30];
    int fees;
    int result;
};

struct student getinfo();
void print(struct student s1);

int main()
{
    struct student s1, s2;

    clrscr();

    printf("enter the details of 1st student\n");

    s1=getinfo();

    printf("enter the details of 2nd student\n");

    s2=getinfo();

    if(s1.result>s2.result)
    {
        print(s1);
    }
    else
    {
        print(s2);
    }
}
```

```

}
getch();
return (0);
};

struct student getinfo()
{
    struct student s1;
    printf("roll no.: ");
    scanf("%d",&s1.rollno);
    printf("name: ");
    scanf("%s",s1.name);
    printf("section: ");
    scanf("%s",s1.sec);
    printf("fees: ");
    scanf("%d",&s1.fees);
    printf("result: ");
    scanf("%d",&s1.result);
    printf("department: ");
    scanf("%s",s1.dept);
    return s1;
}

void print(struct student s1)
{
    printf("the details of students who got highest marks are as follows: \n");
    printf("roll no.: %d\n", s1.rollno);
    printf("name: %s\n", s1.name);
    printf("section: %s\n", s1.sec);
    printf("department: %s\n", s1.dept);
    printf("fees: %d\n", s1.fees);
    printf("result: %d\n", s1.result);
}

```

**Output:**

```
enter the details of 1st student
roll no.: 9
name: anvita
section: b
fees: 45
result: 98
department: ise
enter the details of 2nd student
roll no.: 5
name: sanjana
section: e
fees: 50
result: 92
department: cse
the details of students who got highest marks are as follows:
roll no.: 9
name: anvita
section: b
department: ise
fees: 45
result: 98
```