

REGISTRATION NUMBER: 19BCS0012

NAME OF THE STUDENT: NITHISH.G

### Activity -7 (Program in Strings)

1. Write a C program to perform String Copy, String Concatenation, String Compare and Length of String with built in Functions

```
#include<stdio.h>

#include<string.h>

void main()

{

char a[100],b[100];

printf("enter the frist string1 \n");

gets(a);

printf(" enter the second string2 \n");

gets(b);

strcpy(a,b);

printf(" the copied string from second to first now string1:%s \n",a);

printf(" enter two strings to combine\n");

gets(a);

gets(b);

strcat(a,b);

printf("\n the combined string : %s",a);

    printf("Enter first string : ");

    gets(a);

    printf("Enter second string : ");

    gets(b);

    if(strcmp(a,b)==0)
```

```

        {
            printf("Both the strings are equal");
        }
    else
    {
        printf("\nBoth the strings are not equal");
    }

    printf("\nEnter the String to find the length : ");
    gets(a);

    printf("\nLength of Str is %ld", strlen(a));

    getch();
}

```

Output

```

D:\19BCS0012 NITHISH\strings.exe
enter the frist string1
hii
enter the second string2
hello
the copied string from second to first now string1:hello
enter two strings to combine
how are
you

the combined string : how are youEnter first string : hello
Enter second string : world

Both the strings are not equal
Enter the String to find the length : nithish
Length of Str is 7

```

```
#include<stdio.h>
```

```
#include<string.h>

int main()
{
    char a[100],b[100];

    int i,j;

    printf("Enter string s1 copy to s2: ");

    gets(a);

    for(i = 0; a[i] != '\0'; ++i)
    {
        b[i] = a[i];
    }

    a[i] = '\0';

    printf("String s2: %s", b);


    printf("\nEnter the String to find the length : ");

    gets(a);


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


    printf("Length of Str is %d", i);


    printf("\n Please Enter the First String : ");

    gets(a);


    printf("\n Please Enter the Second String : ");

    gets(b);
```

```

while(a[i] == b[i] && a[i] != '\0')
    i++;

if(a[i] < b[i])
{
    printf("\n str1 is less than str2");
}
else if(a[i] > b[i])
{
    printf("\n str1 is greater than str1");
}
else
{
    printf("\n str1 is Equal to str2");
}

printf("\nEnter first string to combine: ");
gets(a);

printf("\nEnter second string: ");
gets(b);

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

for(j=0; b[j]!='\0'; ++j, ++i)
{
    a[i]=b[j];
}

a[i]='\0';

```

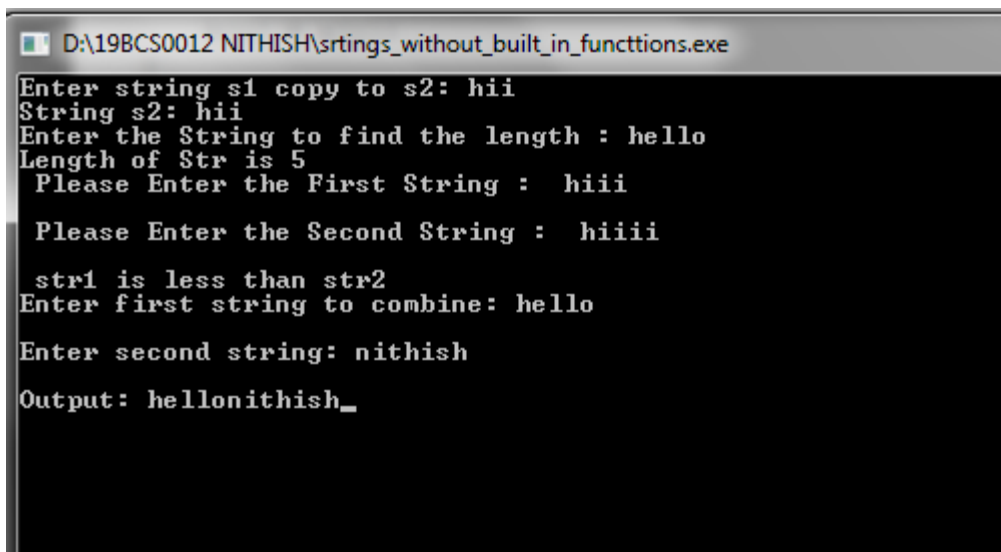
```
printf("\nOutput: %s",a);
```

```
getch();
```

```
return 0;
```

```
}
```

Output



```
D:\19BCS0012 NITHISH\srtings_without_built_in_funcctions.exe
Enter string s1 copy to s2: hii
String s2: hii
Enter the String to find the length : hello
Length of Str is 5
Please Enter the First String : hiii
Please Enter the Second String : hiiii
str1 is less than str2
Enter first string to combine: hello
Enter second string: nithish
Output: hellonithish_
```

Activity 8:

### QNO-1

1. Design a structure to store the name, account number and balance of 'n' customers and their information. Write a C program to print the details of all the customers.

### INPUT:

```
#include<stdio.h>
```

```
#include<conio.h>
```

```
struct customer_list
```

```
{
```

```
    char name[100];
```

```
    int account_number;
```

```
float balance;

};

void main()
{
    int n,i;

    struct customer_list c[n];

    printf("\n enter the number of customer list you want to create:-");

    scanf("%d",&n);

    for(i=1;i<n;i++)
    {
        printf("\n customer %d details\n",i);

        printf("\n enter customer name:");

        scanf("%s",c[i].name);

        printf("\n customer account number:");

        scanf("%d",&c[i].account_number);

        printf("\n customer account balance:");

        scanf("%f",c[i].balance);

    }

    getch();

}
```

Output

```
D:\19BCS0012 NITHISH\struc.exe

enter the number of customer list you want to create:-3

customer 1 details

enter customer name:adhee

customer account number:190046

customer account balance:1000000000.56

customer 2 details

enter customer name:saru

customer account number:190016

customer account balance:16766346585465869.9

customer 3 details

enter customer name:lokesh

customer account number:190027

customer account balance:132325324654357568.9
```

## QNO-2

2. Write a C program to maintain a record of “n” student details using an array of structures with four fields (Roll number, Name, Marks, and Grade). Each field is of an appropriate data type. Print the marks of the student given student name as input.

### INPUT:

```
#include<stdio.h>

#include<string.h>

#include<conio.h>

struct student_details
{
    int rlnm;
    char name[100];
```

```

        int marks;

char grd[1];

};

void main()
{
    int n,i;

    struct student_details c[n];

    printf("\n enter the number of student list you want to create:-");

    scanf("%d",&n);

    for(i=1;i<=n;i++)
    {

        printf("\n\n student %d details\n",i);

        printf("\n enter student name:");

        scanf("%s",c[i].name);

        printf("\n student roll number:");

        scanf("%d",&c[i].rlnm);

        printf("\n student marks out of 100%:");

        scanf("%d",&c[i].marks);

    }

    char search_name[100];

    printf("\n enter the student name to search and display their mark details:");

    scanf("%s",search_name);

    for(i=1;i<=n;i++)

    {

```



```
if(strcmp(search_name,c[i].name)==0)
{
    printf("\n student name is : %s",c[i].name);
    printf("\n student roll number is : %d",c[i].rlnm);
    printf("\n student marks out of 100 = %d ",c[i].marks);

}
}

getch();

}
```

**OUTPUT:**

D:\19BCS0012 NITHISH\struc.exe

enter the number of student list you want to create:-3

student 1 details

enter student name:adhee

student roll number:190046

student marks out of 100:88

student 2 details

enter student name:charu

student roll number:190016

student marks out of 100:98

student 3 details

enter student name:keerthiga

student roll number:190062

student marks out of 100:89

enter the student name to search and display their mark details:charu

student name is : charu

student roll number is : 190016

student marks out of 100 = 98