

Lecture 10

Program for strings

Program to calculate length of string

```
#include <stdio.h>
int main()
{
char s[1000],i;
printf("Enter a string: ");
scanf("%s",s);
for(i=0; s[i]!='\0'; ++i);
printf("Length of string: %d",i);
return 0;
}
```

Program to find reverse of string

```
#include <stdio.h>
int main()
{
char s1[100], s2[100], i;
printf("Enter string s1: ");
scanf("%s",s1);
for(i=0; s1[i]!='\0'; ++i)
{
s2[i]=s1[i];
}
s2[i]='\0';
printf("String s2: %s",s2);
return 0;
}
```

Program to calculate concatenation of string

```
#include <stdio.h>
#include <string.h>
void main()
{
char string1[20], string2[20];
int i, j, pos;
printf("Enter the first string : ");
scanf("%s", string1);
printf("Enter the second string: ");
scanf("%s", string2);
printf("First string = %s\n", string1);
printf("Second string = %s\n", string2);
for (i = 0; string1[i] != '\0'; i++)
{ ; }
pos = i;
for (j = 0; string2[j] != '\0'; j++)
{
string1[i] = string2[j++];
}string1[i] = '\0';
printf("Concatenated string = %s\n", string1);
}
```

Program to compare two strings

```
#include <stdio.h>
void main()
{
int count1 = 0, count2 = 0, flag = 0, i;
char string1[10], string2[10];
printf("Enter a string:");
gets(string1);
printf("Enter another string:");
gets(string2);
while (string1[count1] != '\0')
count1++;
while (string2[count2] != '\0')
count2++;
i = 0;
```

```
while ((i < count1) && (i < count2))
{
if (string1[i] == string2[i])
{
i++;
continue;
}
if (string1[i] < string2[i])
{
flag = -1;
break;
}
if (string1[i] > string2[i])
{
flag = 1;
break;
}}
if (flag == 0)
printf("Both strings are equal \n");
if (flag == 1)
printf("String1 is greater than string2 \n", string1, string2);
if (flag == -1)
printf("String1 is less than string2 \n", string1, string2);
}
```