

Ex. No14 **Count Number of Characters and Digits in a String**

Aim:

To write a C program to print number of characters and digits in a given string.

Algorithm:

- 1) Start the program.
- 2) Declare variables 'i', 'len', 'n', 'nodig' and 'noch'.
- 3) Declare a character array 'str' to store string.
- 4) Get the string 'str'.
- 5) Calculate 'len' using strlen(str) function.
- 6) For i equal to 0 to len do the following
 - a). Check if 'str[i]' is a digit
 - i). Increment 'nodig' by one.
 - b). Check if 'str[i]' is an alphabet
 - i). Increment 'noch' by one.
- 7) Display the number of characters stored in 'noch'.
- 8) Display the number of digits stored in 'nodig'.
- 9) Stop the program.

Program:

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

void main()
{
    int i,len,n,nodig,noch;
    char str[30];
    clrscr();
    nodig = noch = 0;
    printf("\nEnter a string: ");
    gets(str);
    len = strlen(str);
    for(i=0;i<len;i++)
    {
        if(isdigit(str[i]))
            nodig++;
        if(isalpha(str[i]))
            noch++;
    }
    printf("\nNumber of Characters: %d",noch);
    printf("\nNumber of Digits: %d",nodig);
    getch();
}
```

Result:

Thus the C program to print number of characters and digits in a given string is executed successfully.