EXPERIMENT:-4C

PROGRAM:-

```c
#include<stdio.h>

#include<string.h>

void main()
{
char s[100];
int i,flag,flag1,a,b;
int l,count1,count2;
printf("enter a string to check:");
scanf("%s",s);
l=strlen(s);   flag=1;
for(i=0;i<l;i++)
{
if(s[i]!='0' && s[i]!='1')
{
flag=0;
}
}
if(flag!=1)
printf("string is Not Valid\n");       if(flag==1)
{
i=0;count1=0;
while(s[i]=='0') // Count the no of 0s in the front
{

count1++;
i++;
}
while(s[i]=='1')
{
i++; // Skip all 1s
}
flag1=1;        count2=0;
        while(i<l)
{
if(s[i]=='0')// Count the no of 0s at the end
{
count2++;                         }
                else
{
flag1=0;
}

i++;
```

```c
}
        if(flag1==1)
{
if(count1==count2)
{
                printf("The string satisfies the condition
                0n1m0n\n");         printf ("String Accepted\n");
        }
else
        {
            printf("The string does not satisfy the condition
            0n1m0n\n");     printf("String Not Accepted\n");
        }
}            else
{        printf("The string does not satisfy the condition 0n1m0n\n");
            printf("String Not Accepted\n");
        }
}
}
```

OUTPUT:-

```
enter a string to check:0000110000
The string satisfies the condition 0n1m0n
String Accepted

Process returned 0 (0x0)    execution time : 12.437 s
Press any key to continue.
```

```
enter a string to check:000111010
The string does not satisfy the condition 0n1m0n
String Not Accepted

Process returned 0 (0x0)    execution time : 5.875 s
Press any key to continue.
```

```
enter a string to check:10aabb01
string is Not Valid

Process returned 0 (0x0)    execution time : 6.329 s
Press any key to continue.
```