

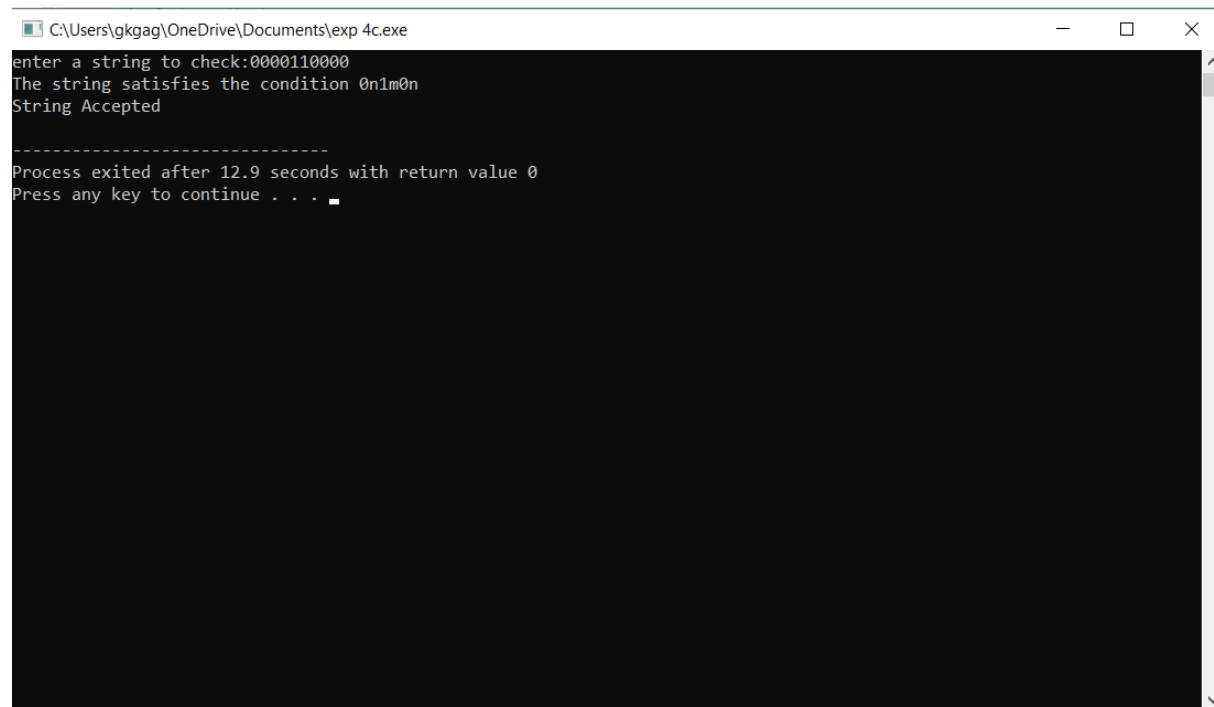
A STRING BELONGS TO A GRAMMAR(3)

```
#include<stdio.h>
#include<string.h>
int 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++;
        }
    }
```

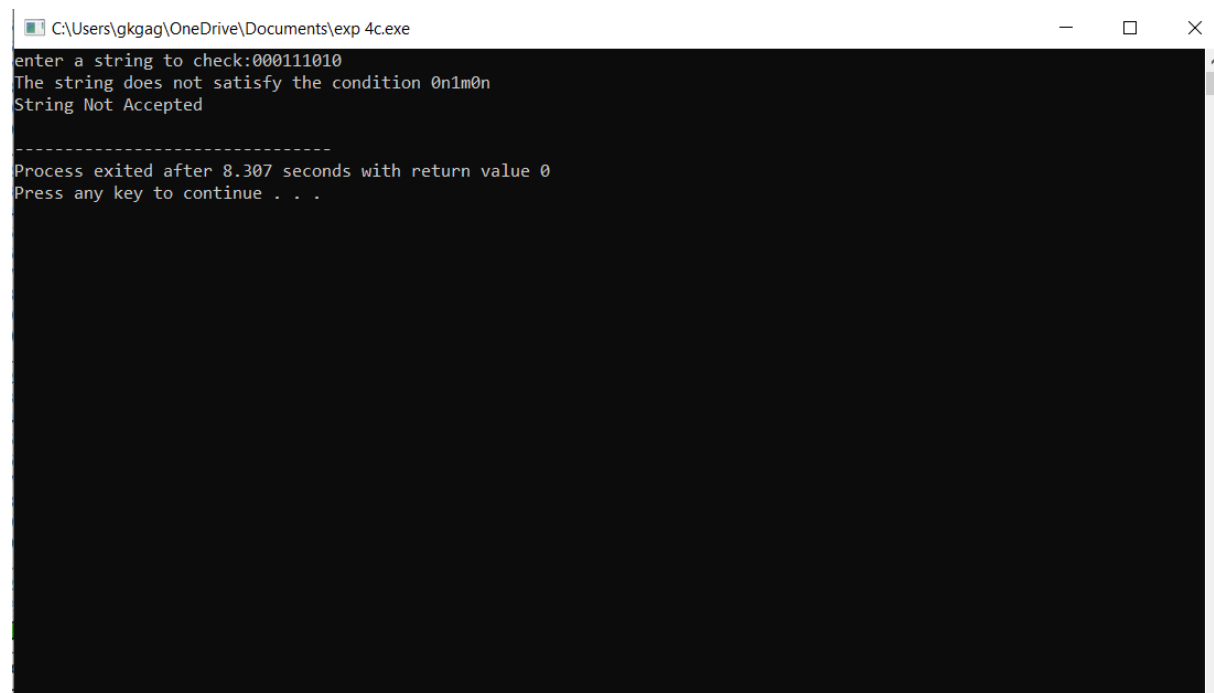
```
while(s[i]=='1')
{
i++; // Skip all 1s
}
flag1=1;
count2=0;
while(i<l)
{
if(s[i]=='0')// Count the no of 0s at the end
{
count2++;
}
else
{
flag1=0;
}
i++;
}
if(flag1==1)
{
if(count1==count2)
{
printf("The string satisfies the condition 0n1m0n\n");
printf("String Accepted\n");
}
else
{
printf("The 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");  
}  
}  
}
```



```
C:\Users\gkgag\OneDrive\Documents\exp 4c.exe  
enter a string to check:0000110000  
The string satisfies the condition 0n1m0n  
String Accepted  
  
-----  
Process exited after 12.9 seconds with return value 0  
Press any key to continue . . .
```



```
C:\Users\gkgag\OneDrive\Documents\exp 4c.exe  
enter a string to check:000111010  
The string does not satisfy the condition 0n1m0n  
String Not Accepted  
  
-----  
Process exited after 8.307 seconds with return value 0  
Press any key to continue . . .
```