To write a C program to check whether a string belongs to the grammar S -> 0 S 0 | 1 S 1 | 0 | 1 | ε

AIM : To write a C program to check whether a string belongs to the grammar S -> 0 S 0 | 1 S 1 | 0 | 1 | ε

Program:

```c
#include<stdio.h>

#include<string.h>

int main(){

char s[100];

int i,flag;

int l;

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)

{

if (s[0]=='0'&&s[l-1]=='1')

printf("string is accepted\n");

else

printf("string is Not accepted\n");

}

}
```
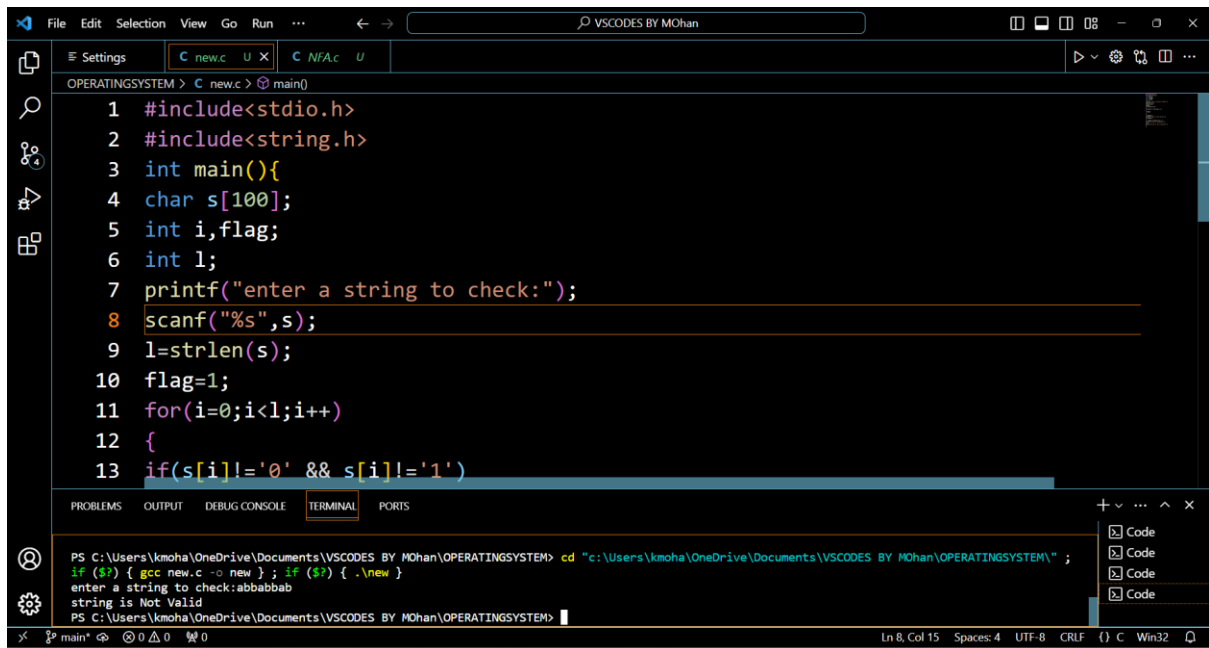
OUTPUT:

}**RESULT:** Output is successfully obtained.