

**To write a C program to check whether a string belongs to the grammar**

**AIM :** To write a C program to find  $\epsilon$ -closure of a Non-Deterministic Finite Automata with  $\epsilon$ -moves

**Program:**

```
#include

#include int main()

{

char s[100];

int i,flag;

int l; printf("enter a string to check:");

scanf("%s",s);

l=strlen(s);

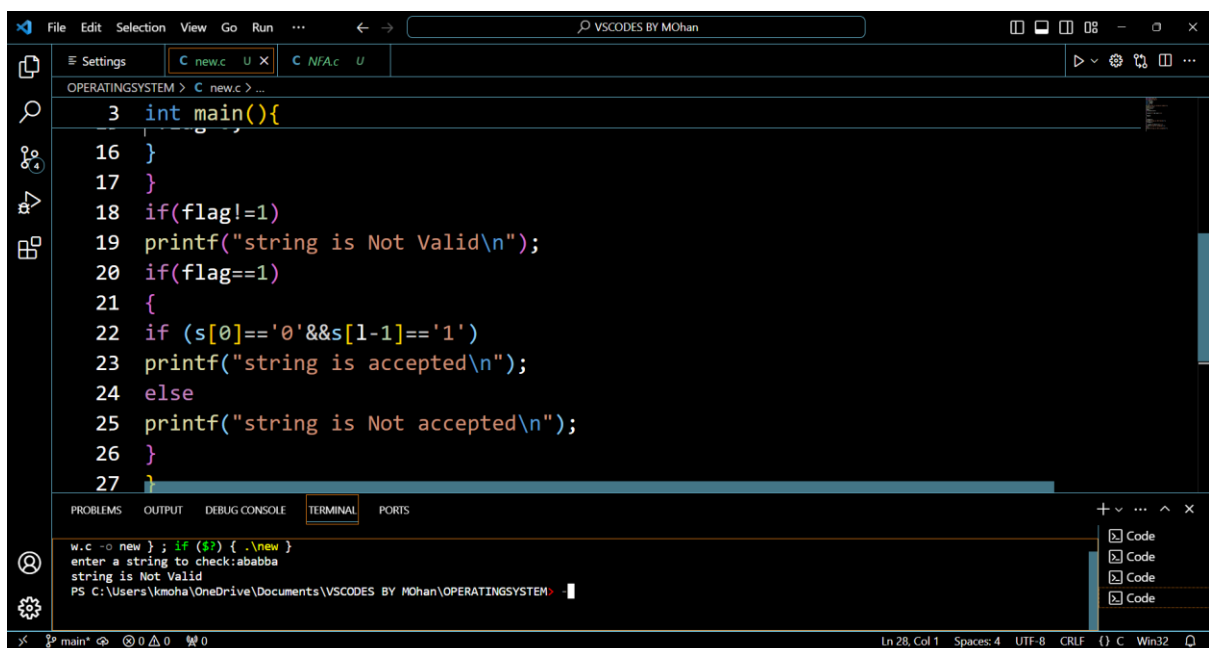
flag=1;

if(a[0]=='a'&&a[l-1]=='a':

printf("the string is valid");

}
```

**OUTPUT:**

The image is a screenshot of the Visual Studio Code (VS Code) editor interface. The main editor window displays a C program in a file named 'new.c'. The code is as follows:

```
3 int main(){
16 }
17 }
18 if(flag!=1)
19 printf("string is Not Valid\n");
20 if(flag==1)
21 {
22 if (s[0]=='0'&&s[l-1]=='1')
23 printf("string is accepted\n");
24 else
25 printf("string is Not accepted\n");
26 }
27 }
```

The bottom panel of the VS Code interface shows the 'TERMINAL' tab. It contains the command prompt output for running the program. The command entered is 'w.c -o new', followed by the prompt 'enter a string to check:'. The user has entered 'ababba', and the program's output is 'string is Not Valid'. The terminal path is 'PS C:\Users\kmoha\OneDrive\Documents\VSCODES BY MOHAN\OPERATINGSYSTEM>'. The status bar at the bottom indicates the current file is 'main.c' at line 28, column 1, with 4 spaces, using UTF-8 encoding and CRLF line endings.

**RESULT:** Output is successfully obtained.