Output:

```
D:\6thsem\bibekParajuli\compiler\lab_1.exe
--To check whether entered string is a valid comment or not--
Enter comment: //Variable Declaration
It is a single-line comment.
Do you want to continue? (y/n): y
Enter comment: /variable declaration
It is not a comment.
Do you want to continue? (y/n): y
Enter comment: /* variable declaration*/
It is a multi-line comment.
Do you want to continue? (y/n):
```

Output:

```
D:\6thsem\bibekParajuli\compiler\lab_2.exe
--Recognizing string generated by a*b+
--Enter string: aabb
aabb is accepted under rule 'a*b+'.
Do you want to continue? (y/n): y
Enter string: baaab
baaab is not accepted under rule 'a*b+'.
Do you want to continue? (y/n): y
Enter string: bbbbb
bbbbb is accepted under rule 'a*b+'.
Do you want to continue? (y/n):
```

Output:

```
D:\6thsem\bibekParajuli\compiler\lab_3.exe
--To check whether identifier is valid or not--
Enter an identifier: ab_1
Valid Identifier
Do you want to continue? (y/n): y

Enter an identifier: _ab1
Valid Identifier
Do you want to continue? (y/n): y

Enter an identifier: 1ab_

Not a valid identifier.

Enter an identifier: __abc
Valid Identifier
Do you want to continue? (y/n):
```

Output:

lex_check - Notepad

File Edit Format View Help

```
int main()
{
        int a,b,c;
        c = a-b;
}
```

Ln 1, Col 1 | 100% | Windows (CRLF) | UTF-8

D:\6thsem\bibekParajuli\compiler\lab_4.exe

```
--Lexical Analyzer--
int is a keyword
main is a identifier
int is a keyword
abc is a identifier
c is a identifier
= is operator

- is operator

ab is a identifier
--------------------------------
Process exited after 9.383 seconds with return value 0
Press any key to continue . . .
```

Output:

```
D:\6thsem\bibekParajuli\compiler\lab_5.exe
--To find First--
How many number of productions? : 3
Enter production Number 1: S=AB
Enter production Number 2: A=abc
Enter production Number 3: A=d

Find the FIRST of: S

FIRST(S) = { a d }
Press 'y' to continue: y

Find the FIRST of: A

FIRST(A) = { a d }
Press 'y' to continue: y

Find the FIRST of: a

FIRST(a) = { a }
Press 'y' to continue:
```

Output:

```
D:\6thsem\bibekParajuli\compiler\lab_6.exe
--To find FOLLOW--
Enter the no. of productions: 6
Enter 6 productions
Production with multiple terms should be given as separate productions
E=TX
X=+TX
T=FY
Y=*FY
F=(E)
F=id
Find FOLLOW of --> E
FOLLOW (E) = { $) }
Do you want to continue (Press 1 to continue...)?1
Find FOLLOW of --> X
FOLLOW (X) = { $) }
Do you want to continue (Press 1 to continue...)?1
Find FOLLOW of --> T
FOLLOW (T) = { $)+ }
Do you want to continue (Press 1 to continue...)?1
Find FOLLOW of --> Y
FOLLOW (Y) = { $)+ }
Do you want to continue (Press 1 to continue...)?1
Find FOLLOW of --> F
FOLLOW (F) = { $)+* }
Do you want to continue (Press 1 to continue...)?
```

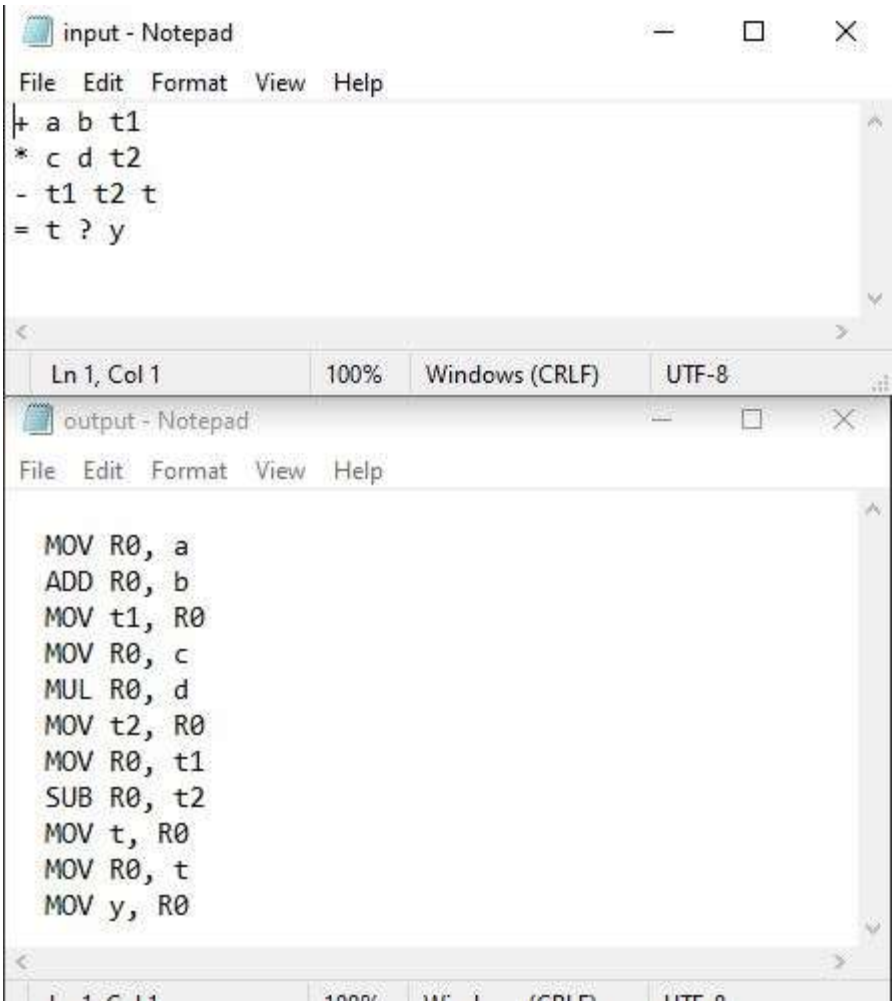
Output:

```
D:\6thsem\bibekParajuli\compiler\lab_7.exe

 Enter the input string:i+i*i

 Stack                    input
***************
$bt                       i+i*i$
$bcf                      i+i*i$
$bci                      i+i*i$
$b                        +i*i$
$bt+                      +i*i$
$bcf                      i*i$
$bci                      i*i$
$bcf*                     *i$
$bci                      i$
$b                        $

 SUCCESS
--------------------------------
Process exited after 123.4 seconds with return value 0
Press any key to continue . . .
```

Output:

```
D:\6thsem\bibekParajuli\compiler\lab_8.exe

 --SHIFT REDUCE PARSER--

 GRAMMER

 E->E+E
 E->E/E
 E->E*E
 E->a/b
 Enter the input string:        a+a*b

         Stack implementation table
 Stack           Input symbol            Action
--               --              --

 $               a+a*b$                  --
 $a               +a*b$                  shift a
 $E               +a*b $                 E->a
 $E+               a*b$                  shift +
 $E+a               *b$                  shift a
 $E+E               *b $                 E->a
 $E                 *b $                 E->E*E
 $E*                 b$                  shift *
 $E*b                 $                  shift b
 $E*E                 $                  E->b
--------------------------------
Process exited after 15.42 seconds with return value 0
Press any key to continue . . .
```

Output:


input - Notepad
File Edit Format View Help
+ a b t1
* c d t2
- t1 t2 t
= t ? y
Ln 1, Col 1
100%
Windows (CRLF)
UTF-8
output - Notepad
File Edit Format View Help
MOV R0, a
ADD R0, b
MOV t1, R0
MOV R0, c
MUL R0, d
MOV t2, R0
MOV R0, t1
SUB R0, t2
MOV t, R0
MOV R0, t
MOV y, R0