**INFIX TO POSTFIX:-**

PROGRAM:

#include<stdio.h>

#include<string.h>

#include<stdlib.h>

int F(char symbol)

{

switch(symbol)

{

case'+':

case'-':return 2;

case'\*':

case'/':return 4;

case'^':

case'$':return 5;

case'(':return 0;

case'#':return -1;

default:return 8;

}

}

int G(char symbol)

{

switch(symbol)

{

case'+':

case'-':return 1;

case'\*':

case'/':return 3;

case'^':

case'$':return 6;

case'(':return 9;

case')':return 0;

default:return 7;

}

}

void infix\_postfix(char infix[],char postfix[])

{

int top,i,j;

char s[30],symbol;

top=-1;

s[++top]='#';

j=0;

for(i=0;i<strlen(infix);i++)

{

symbol=infix[i];

while(F(s[top])>G(symbol))

{

postfix[j]=s[top--];

j++;

}

if(F(s[top])!=G(symbol))

s[++top]=symbol;

else

top--;

}

while(s[top]!='#')

{

postfix[j++]=s[top--];

}

postfix[j]='\0';

}

int main()

{

char infix[20];

char postfix[20];

printf("Enter the valid infix expression ");

scanf("%s",infix);

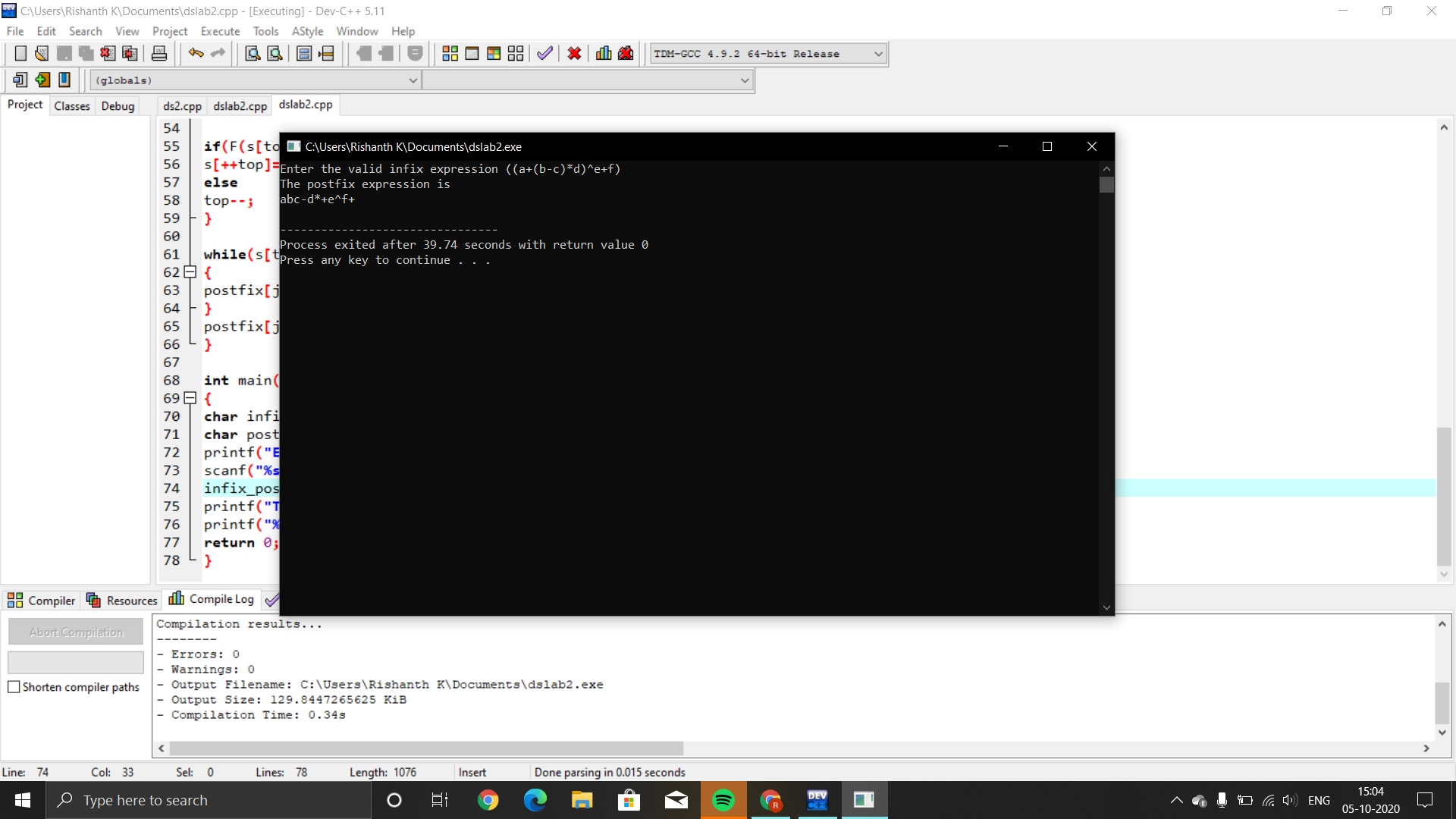
infix\_postfix(infix , postfix );

printf("The postfix expression is \n");

printf("%s\n",postfix);

return 0;

}

**OUTPUT:**