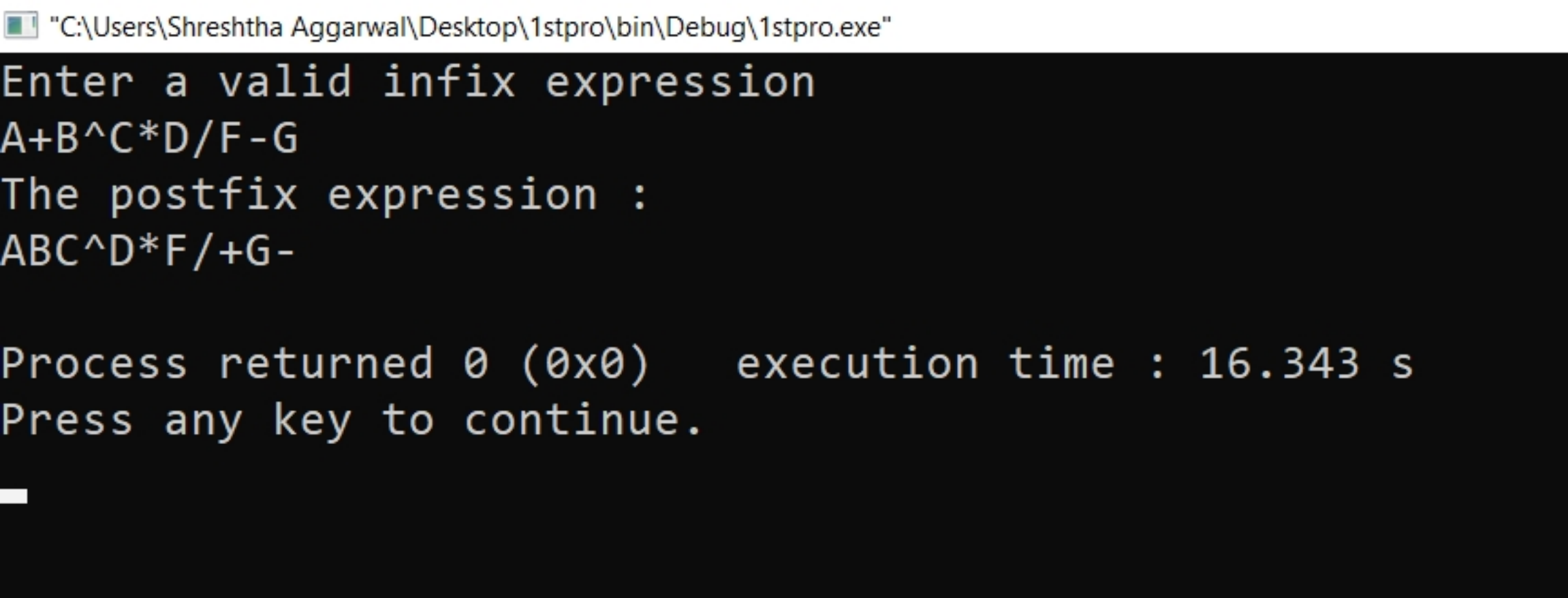
```c
//Infix to postfix
#include<stdio.h>
#include<string.h>
int F(char symbol)
{
     switch(symbol)
     {
          case '+':
          case '-':return 2;
          case '*':
          case '/':return 4;
          case '^':return 5;
          case '$':return 0;
          case '#':return -1;
          default:return 8;
     }
}
int G(char symbol)
{
     switch(symbol)
     {
     case '+':
     case '-':return 1;
     case '*':
     case '/':return 3;
     case '^':
     case '$':return 6;
     case '(':return 9;
     case ')':return 0;
     default :return 7;
     }
}
void infix_postfix(char infix[],char postfix[])
```

```
294 {
295     int top, i, j;
296     char s[30],symbol;
297     top=-1;
298     s[++top]='#';
299     j=0;
300     for(i=0;i<strlen(infix);i++)
301     {
302         symbol=infix[i];
303         while(F(s[top])>G(symbol))
304         {
305             postfix[j]=s[top--];
306             j++;
307         }
308         if(F(s[top])!=G(symbol))
309             s[++top]=symbol;
310         else
311             top--;
312     }
313     while (s[top]!='#')
314     {
315         postfix[j++]=s[top--];
316     }
317     postfix[j]='\0';
318 }
319 int main()
320 {
321     char infix[20];
322     char postfix[20];
323     printf("Enter a valid infix expression\n");
324     scanf("%s",infix);
```

```
325     infix_postfix(infix,postfix);
326     printf("The po char main::infix : \n");
327     printf("%s\n",postfix);
328     return 0;
329 }
```


"C:\Users\Shreshtha Aggarwal\Desktop\1stpro\bin\Debug\1stpro.exe"
Enter a valid infix expression
A+B^C*D/F-G
The postfix expression :
ABC^D*F/+G-
Process returned 0 (0x0)   execution time : 16.343 s
Press any key to continue.