

```
#include <stdio.h>
#include <stdlib.h>
#include <process.h>
#include <string.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 Conversion(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--];
    }
}

```

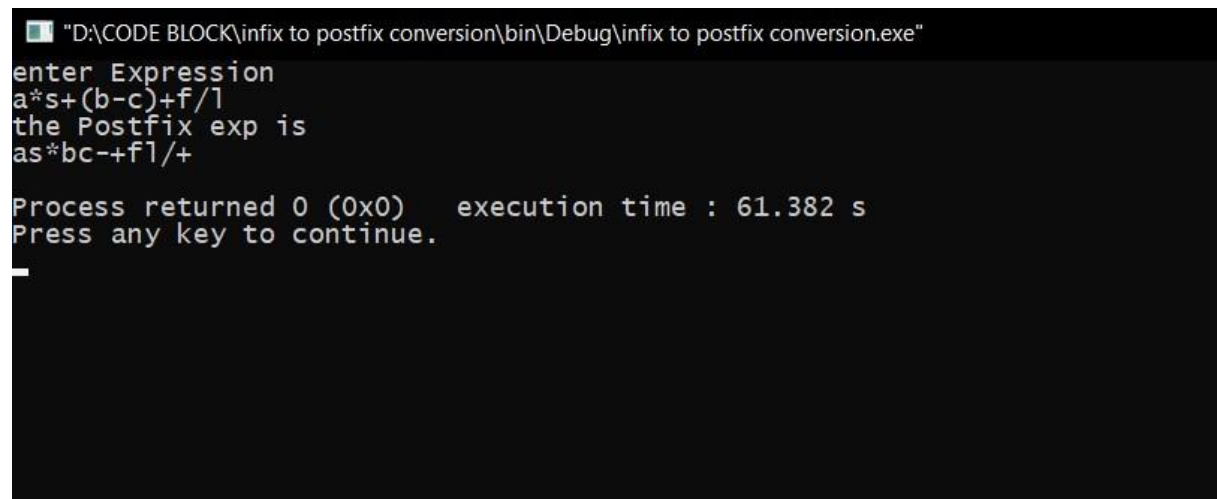
```

    }
    postfix[j]='\0';
}

int main()
{
    char infix[20];
    char postfix[20];
    printf("enter Expression\n");
    scanf("%s",infix);
    Conversion(infix,postfix);
    printf("the Postfix exp is \n");
    printf("%s\n",postfix);

}

```



The screenshot shows a Windows command prompt window with the title bar "D:\CODE BLOCK\infix to postfix conversion\bin\Debug\infix to postfix conversion.exe". The program's output is as follows:

```

enter Expression
a*s+(b-c)+f/l
the Postfix exp is
as*bc-+f l/+

Process returned 0 (0x0)   execution time : 61.382 s
Press any key to continue.

```

"D:\CODE BLOCK\infix to postfix conversion\bin\Debug\infix to postfix conversion.exe"

enter Expression

a+b\*(c-d/f)+G

the Postfix exp is

abcdf/-\*+G+

Process returned 0 (0x0)    execution time : 27.283 s

Press any key to continue.