

```

#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;
        case '#': return -1;
        default: return 7;
    }
}

void conversion(char infix[], char postfix[]){
    int top, i, j;
    char s[50], 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: ");
    scanf("%s",infix);
    conversion(infix, postfix);
    printf("The post fix expression: %s",postfix);
    return 0;
}

```

## Output:

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  2:
Windows PowerShell
Copyright (c) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS D:\Prg data> cd "d:\Prg data\C&C++\Stack implementation\" ; if ($?) { gcc inf_to_post.c -o inf_to_post } ; if ($?) { .\inf_to_post }
Enter Expression: A+B*(C-D)+R/T*F
The post fix expression: ABCD-*+RT/F*+
PS D:\Prg data\C&C++\Stack implementation>

```