

```

#include<stdio.h>
#include<stdlib.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 infix_postfix(char infix[]){
    int top,j,i;
    char s[30],postfix[30];
    char 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';
    printf("Postfix: ");
    puts(postfix);
}
int main()
{
    char exp[30];
    printf("enter a expression:\n");
    scanf("%s",exp);
    infix_postfix(exp);
}

```

enter a expression:

$((a+b)-(b*d))$

Postfix: $ab+bd*-$

Process returned 0 (0x0) execution time : 42.990 s

Press any key to continue.

■