```c
1    #include<stdio.h>
2    #include<string.h>
3    #include<stdlib.h>
4    int F(char symbol)
5    {
6         switch(symbol)
7         {
8              case '+':
9              case '-': return 2;
10             case '*':
11             case '/': return 4;
12             case '^':
13             case '$':return 5;
14             case '(': return 0;
15             case '#': return -1;
16             default: return 8;
17        }
18   }
19   int G(char symbol)
20   {
21        switch(symbol)
22        {
23             case '+':
24             case '-': return 1;
25             case '*':
26             case '/': return 3;
27             case '^':
28             case '$':return 6;
29             case '(': return 9;
30             case ')': return 0;
31             default: return 7;
32        }
33
34   }
35   void infix_postfix(char infix[],char postfix[])
36   {
37        int top,i,j;
38        char s[30],symbol;
39        top=-1;
40        s[++top] = '#';
```

Example.c × practice.html

```c
    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';
}
void main()
{
    char infix[20];
    char postfix[20];
    printf("Enter the valid infix expression\n");
    scanf("%s",infix);
    infix_postfix(infix,postfix);
    printf("the postfix expression is\n");
    printf("%s\n",postfix);
```