

```

#include <stdio.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 '$': return 6;
        case '(': return 9;
        case ')': return 0;
        default : return 7;
    }
}

```

```

void infix_postfix(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--];
        }
        if (F(s[top]) != G(symbol)) {
            s[++top] = symbol;
        } else {
            top--;
        }
    }
    while (s[top] != '#') {
        postfix[j++] = s[top--];
    }
    postfix[j] = '\0';
}

```

```
void main () {
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```
    char infix[20], postfix[20];
```

```
    printf ("Enter a valid infix expression: \n");
```

```
    scanf ("%s", infix);
```

```
    infix -> postfix (infix, postfix);
```

```
    printf ("The postfix expression is: \n");
```

```
    printf ("%s", postfix);
```

```
}
```