

```

#include<iostream>
#include<cstring>
#include<stack>
using namespace std;

int getweight(char ch) {
    switch (ch) {
        case '/':
        case '*':
            return 2;
        case '+':
        case '-':
            return 1;
        default:
            return 0;
    }
}

void infix2postfix(char infix[], char postfix[], int size) {
    stack<char> s;
    int weight;
    int i = 0;
    int k = 0;
    char ch;

    while (i < size) {
        ch = infix[i];
        if (ch == '(') {
            s.push(ch);
            i++;
            continue;
        }
        if (ch == ')') {
            while (!s.empty() && s.top() != '(') {
                postfix[k++] = s.top();
                s.pop();
            }
            s.pop(); // Pop '('
            i++;
            continue;
        }
        weight = getweight(ch);
        if (weight == 0) {
            postfix[k++] = ch;
        } else {
            if (s.empty()) {
                s.push(ch);
            } else {
                while (!s.empty() && s.top() != '(' &&
                    weight <= getweight(s.top())) {
                    postfix[k++] = s.top();
                    s.pop();
                }
                s.push(ch);
            }
        }
        i++;
    }

    while (!s.empty()) {
        postfix[k++] = s.top();
    }
}

```

```

        s.pop();
    }
    postfix[k] = '\0'; // Null-terminate the postfix expression
}

int main() {
    char infix[100];
    cout << "\nEnter Infix Operation:";
    cin >> infix;
    int size = strlen(infix);
    char postfix[size * 2]; // Make sure there is enough space for the postfix expression
    infix2postfix(infix, postfix, size);
    cout << "\nInfix Expression :: " << infix;
    cout << "\nPostfix Expression :: " << postfix;
    cout << endl;
    return 0;
}

/*-----OUTPUT-----
Enter Infix Operation:/*ABC*D

Infix Expression :: /*ABC*D
Postfix Expression :: *ABC*D/

-----
Process exited after 17.06 seconds with return value 0
Press any key to continue . . .
*/

```