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//Aditya Agre
//SYCOA06
//Infix to postfix
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#include<iostream>
#include<string.h>
#include<stack>
using namespace std;
// A Function with return type int to return precedence of operators
int
precedence (char ch)
{
    if (ch == '^')
        return 3;
    else if (ch == '/' || ch == '*')
        return 2;
    else if (ch == '+' || ch == '-')
        return 1;
    else
        return -1;
}
```

```
// A Function to convert infix expression to postfix expression
string
infixToPostfix (string s)
{
    stack < char >st;          //For stack operations, we are using C++ built in stack
    string ans = "";
    for (int i = 0; i < s.length (); i++)
    {
        char ch = s[i];
        // If the current character is an operand, add it to our answer string.
        if ((ch >= 'a' && ch <= 'z') || (ch >= 'A' && ch <= 'Z')
            || (ch >= '0' && ch <= '9'))
            ans += ch;          // Append the current character of string in our answer
        // If the current character of string is an '(', push it to the stack.
        else if (ch == '(')
            st.push ('(');
        // If the current character of string is an ')', append the top character of stack in our answer string
        // and pop that top character from the stack until an '(' is encountered.
        else if (ch == ')')
        {
            while (st.top () != '(')
            {
```

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        ans += st.top (); // Append the top character of stack in our answer
        st.pop ();
    }
    st.pop ();
}
//If an operator is scanned
else
{
    while (!st.empty () && precedence (s[i]) <= precedence (st.top ()))
    {
        ans += st.top ();
        st.pop ();
    }
    st.push (ch); // Push the current character of string in stack
}
}
// Pop all the remaining elements from the stack
while (!st.empty ())
{
    ans += st.top ();
    st.pop ();
}
return ans;
}

int
main ()
{
    string s;
    cin >> s;
    cout << infixToPostfix (s);
    return 0;
}

```

```

a+b+(c/d-k)*b
ab+cd/k-b*+

```

```

...Program finished with exit code 0
Press ENTER to exit console.

```