Infix to Postfix:-

Class Soluition {

public:

// Function to convert an infix expression to a postfix expression.

int priority(char ch) {

if(ch == '+' || ch == '-') {

return 1;

} else if(ch == '\*' || ch == '/') {

return 2;

} else if(ch == '^') {

return 3;

} else return -1;

}

string infixToPostfix(string s) {

// Your code here

stack<int> st;

int size = s.size();

string ans = "";

for(int i = 0; i < size; i++) {

char ch = s[i];

if(ch >= 'A' && ch <= 'Z' || ch >= 'a' && ch <= 'z' || ch >= '0' && ch <= '9') {

ans += s[i];

} else if(ch == '(') {

st.push(s[i]);

} else if(ch == ')') {

while(!st.empty() && st.top() != '(') {

ans += st.top();

st.pop();

}

st.pop();

} else {

while(!st.empty() && priority(ch) <= priority(st.top())) {

ans += st.top();

st.pop();

}

st.push(ch);

}

}

while(!st.empty()) {

char ch = st.top();

ans += ch;

st.pop();

}

return ans;

}

};