

```
public class ParsePostfix {

    public static void main(String[] args) throws StackEmptyException {
        LinkedList numStack = new LinkedList(); // Create a number stack.
        // Process each character of the first command-line argument.
        for (int i = 0; i < args[0].length(); i++) {
            char c = args[0].charAt(i);
            if (Character.isDigit(c)) {
                // Print each digit; push each digit on number stack.
                System.out.print(c + " ");
                numStack.push(new Integer(Character.digit(c, 36)));
            } else if ((c == '+') || (c == '-') || (c == '*') || (c == '^')) {
                operate(numStack, c);
            }
        }
        System.out.println("    result:" + numStack.top());
    }

    // Put the operate() method code here.
}
```

```
public static int precedence(char operator) {
    switch (operator) {
        case '^':
            return 3;
        case '**':
        case '/':
            return 2;
        case '+':
        case '-':
            return 1;
        default:
            return 0;
    }
}

// Put the operate() method code here.
```