

## Senior Division

## PIP

PROBLEM: Convert an infix expression to prefix

INPUT: There will be 5 lines of input. Each line will be a string expression representing an infix expression. The operators used will be +, -, \* . At most 3 operators and at most 2 sets of parentheses will be used in any one expression.

OUTPUT: For each input line print the expression in prefix.

## SAMPLE INPUT

1. A+B
2. A\*(B-C)
3. (A+B)\*(C-D)
4. A\*B-(C+D)
5. A\*((B+C)\*D)

## SAMPLE OUTPUT

1. +AB
2. \*A-BC
3. \*+AB-CD
4. -\*AB+CD
5. \*A\*+BCD