PREFIX EXPRESSIONS

CHALLENGE DESCRIPTION:

You are given a prefix expression. Write a program which evaluates it.

INPUT SAMPLE:

Your program should accept a file as its first argument. The file contains one prefix expression per line.

For example:

* + 2 3 4

Your program should read this file and insert it into any data structure you like. Traverse this data structure and evaluate the prefix expression. Each token is delimited by a whitespace. You may assume that sum '+', multiplication '*' and division '/' are the only valid operators appearing in the test data.

OUTPUT SAMPLE:

Print to stdout the output of the prefix expression, one per line.

For example:

20

CONSTRAINTS:

- The evaluation result will always be an integer ≥ 0 .
- The number of the test cases is ≤ 40 .