$ g++ -std=gnu++0x \*.cpp -o driver

$ valgrind ./driver < input.txt

==3998== Memcheck, a memory error detector

==3998== Copyright (C) 2002-2015, and GNU GPL'd, by Julian Seward et al.

==3998== Using Valgrind-3.11.0 and LibVEX; rerun with -h for copyright info

==3998== Command: ./driver

==3998==

1 \* 3 / ( 4 % 4 - 6 )

Result: 0

( 4 % 4 - 6 ) / 1 \* 3

Result: -18

( 4 % 4 - 6 ) / ( 1 \* 3 )

Result: -2

1 + 3 / 2

Result: 2

1 + 2 \* 3

Result: 7

( 1 + 2 ) \* 3

Result: 9

1 \* 2 - 5

Result: -3

x + 1

x = Result: 3

x + x + 1

x = Result: 7

==3998==

==3998== HEAP SUMMARY:

==3998== in use at exit: 0 bytes in 0 blocks

==3998== total heap usage: 109 allocs, 109 frees, 30,070 bytes allocated

==3998==

==3998== All heap blocks were freed -- no leaks are possible

==3998==

==3998== For counts of detected and suppressed errors, rerun with: -v

==3998== ERROR SUMMARY: 0 errors from 0 contexts (suppressed: 0 from 0)