Lab 8: order of operations

- lab8 repo includes 3 .c files, lab8a.c, lab8b.c, lab8c.c, plus a makefile to compile them
- each contains one key arithmetic expression of interest
- first, compile and run each program and store the output
- then the goal is to determine the precise order of operations in the expression, including side effects, and document that in file answers.txt

lab8a.c

- Expression of interest is

    z = x+(x++,--y)*x

- six operations to consider/explain in the ordering:

    - +

    - ++

    - --

    - *

    - ,

    - =

lab8b.c

- Expression of interest is

    pr(x++, ++x, &x, ++x)

- Note that function pr has a side effect

    (*c) += 1

- Study output, and again explain the order in which all operations must take place (pay close attention to the order in which the parameters of pr are evaluated)

lab8c.c

- Expression of interest is

    z = !f(&x)?--z:f(&z)

- Function f has both a side effect (*a *= 2)

  and a return value (*a + 1)

- Many operators/operations to consider here:
  - The two calls to function f
  - The not operation, !
  - The evaluation of the operands of the ternary operator ?: and its actual result
  - The predecrement, --
  - The assignment of a value to z