Announcement

• Scheme Art Contest Released. Please see the calendar link. Entries are due 1 May, with voting to take place during RRR week.
Multiply!

Python makes life too easy for us in many ways. For example, machine integers (those directly representable using the processor’s built-in machinery) have a limited range—typically $[-2^{-31}, 2^{31} - 1]$ or $[-2^{-63}, 2^{63} - 1]$.

If the only built-in integers had a limited range like this,

a. How would we represent integers of arbitrary size?

b. How would we add or multiply them?

Let’s restrict ourselves to non-negative numbers.