Recursion

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Opening Discussion

- Minute essay comments:
    - How did the version of sum that worked not run out of memory?
    - Can you only do sums with pre-made data sets?
    - Relative speed of recursion and loops.
    - Format of the inputs. I cleaned things up.
    - How did the first version keep track of the running sum?
    - Is there a way to calculate things like an average with recursion?

More

- Limits of BigInt.
- Options for numeric types:
    - Int, Short, Byte, Long, Double, Float
    - BigInt, BigDecimal
- Getting your head around recursion.
- IcP solutions

Tracing Recursion

- The act of running through code line by line to see what it does is called tracing. It is a very important skill for programmers.

- Tracing often involves writing out variables and tracing how they change or drawing "pictures".

- I want to show you an approach to tracing recursive functions.

Minute Essay

- There are a few significant things that are lacking in our capabilities for programming. What do you see as things we lack that we need to add to be able to solve "real" problems?