We finish with a number of interesting generators.

1. Questions?

2. Recall: Generating the digits of an integer.

3. Aside: several ways to regenerate the integer from its digits.

4. The Kaprekar operation: take a (4-digit) integer, \( n \) with digits not all the same. Call \( \text{large} \) the number constructed from sorting the digits of \( n \) in order (from right to left). Call \( \text{small} \) the number constructed from the digits of \( n \) sorted in reverse order. The Kaprekar operation on \( n \) is the difference between \( \text{large} \) and \( \text{small} \).

5. A generator for constructing all permutations of a list.

6. A generator for constructing all subsets of a list.

7. Floyd’s (difficult) problem.

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