Session 19
Strategy 2: Decrease-and-Conquer

🖹 Lecture Summary

Variable-Size Decrease: Selection Problem

1. Motivation: the median value of a set of numbers
2. Selection problem statement and order statistics
3. Solution idea: a partition procedure
4. Quickselect, examples
5. Implementation notes, performance

🖹 Session Exercise

P14. Code the quickselect algorithm. Check that your code calculates the median correctly in 📖 Exercise 4.5–2. Hint: check results in Excel (use its built-in median function).

📖 **Exercise 4.5** • 2, 3, 5   🛠 13

🖹 Reading List

📖 4.5

🖹 Keywords

Order statistic, median [statistic], [list] partition, pivot, selection [problem]