

Smart Coding & Interview Series

Top-20 Basic Program (Recursive Thinking)

First, understand the solution building strategies and coding for the problems in LIVE/VIDEO session and then you apply those strategies discussed in LIVE/VIDEO session to solve the following problems. Use your favourite language(C/C++/Java/C#/Python/Scala) for coding.

- 1) **Decimal to binary:** Find a recursive algorithm to convert a decimal number to binary representation.
- 2) **Reverse an immutable string:** Find a recursive algorithm to reverse an immutable string and return the result.
- 3) **Display all ternary sequences of length n:** Find an efficient algorithm to display all ternary sequences of length n.
- 4) **Display all decimal sequences of length n:** Find an efficient algorithm to display all decimal sequences of length n.
- 5) **Number of Atoms:** <https://leetcode.com/problems/number-of-atoms/description/>
- 6) **Mini Parser:** <https://leetcode.com/problems/mini-parser/description/>
- 7) **Expression Tree Builder:** <http://lintcode.com/en/problem/expression-tree-build/>