Top-20 Training Program
(Range Query Problems)

Apply the solution building strategies discussed in class to solve following problems.

Group1: Segment/Interval Tree
Segment Tree Build: http://www.lintcode.com/en/problem/segment-tree-build/
Segment Tree Build-II: http://www.lintcode.com/en/problem/segment-tree-build-ii/
Segment Tree Query: http://www.lintcode.com/en/problem/segment-tree-query/
Segment Tree Query-II: http://www.lintcode.com/en/problem/segment-tree-query-ii/
Segment Tree Modify: http://www.lintcode.com/en/problem/segment-tree-modify/

Group2: Quad Tree
Quad Tree Construction: https://leetcode.com/problems/construct-quad-tree/
Quad Tree Intersection: https://leetcode.com/problems/quad-tree-intersection/

Group3: 1D Range queries
Immutable 1D RangeSum: https://leetcode.com/problems/range-sum-query-immutable/description/
Mutable 1D RangeSum: https://leetcode.com/problems/range-sum-query-mutable/description/
Interval Minimum Number: https://www.lintcode.com/problem/interval-minimum-number/description
Interval Sum: https://www.lintcode.com/problem/interval-sum/description
Interval Sum-II: https://www.lintcode.com/problem/interval-sum-ii/description
Count of Smaller Number: https://www.lintcode.com/problem/count-of-smaller-number/description
Count of Smaller Number before Self: https://www.lintcode.com/problem/count-of-smaller-number-before-itself/description
Johns Business: https://www.lintcode.com/problem/johns-business/description
Rectangle Area-II: https://leetcode.com/problems/rectangle-area-ii/
Falling Squares: https://leetcode.com/problems/falling-squares/

Group4: 2D Range queries
Immutable 2D RangeSum: https://leetcode.com/problems/range-sum-query-2d-immutable/description/
Mutable 2D RangeSum: https://leetcode.com/problems/range-sum-query-2d-mutable/description/