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| Data Structure | LEARNED | TEMPLATE | SOLVED PROBLEM |
| Heap ( priority queue ) |  |  |  |
| Binary Trees/ n – ary trees |  |  |  |
| Binary Search Tree ( optimal ) |  |  |  |
| Linked List (single,double,circular) |  |  |  |
| Segment Tree ( with , without Lazy Propagation ) |  |  |  |
| Trie ( prefix tree / redix tree ) |  |  |  |
| Binary Indexed Tree (Fenwick)  ( 1D,2D ) |  |  |  |
| Range Minimum Query (RMQ) |  |  |  |
| Square Root Segmentation |  |  |  |
| Lowest Common Ancestor |  |  |  |
| Heavy Light Decomposition |  |  |  |
| Array Compression (mapping) |  |  |  |
| MO’s Algorithm |  |  |  |
| Sliding Window, Two pointer |  |  |  |
| Histogram, Sparse Table |  |  |  |
| Hashing |  |  |  |
| K-d tree , Splay tree |  |  |  |
| Red – black tree |  |  |  |
| Interval Trees |  |  |  |
| Arrays,Stacks,Queues |  |  |  |
| Disjoint Set Union  (Union Find) |  |  |  |