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| Data Structures | Algorithms | Concepts |
| Linked Lists | Breadth-First Search | Bit Manipulation |
| Trees, Tries & Graphs | Depth-First Search | Memory (Stack vs. Heap) |
| Stacks & Queues | Binary Search | Recursion |
| Heaps | Merge Sort | Dynamic Programming |
| Vectors/ArrayLists | Quick Sort | Big O Time & Space |
| Hash Tables |  |  |

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| Power of 2 | Exact Value (X) | Approx. Value | X Bytes into MB, GB, etc |
| 7 | 128 |  |  |
| 8 | 256 |  |  |
| 10 | 1024 | 1 thousand | 1 KB |
| 16 | 4098 |  | 64 KB |
| 20 | 1048576 | 1 million | 1 MB |
| 30 | 1073741824 | 1 billion | 1 GB |
| 32 | 4294967296 |  | 4 GB |
| 40 | 1099511627776 | 1 trillion | 1 TB |