Topics in the Java language and Data Structures:
Recursion
Recursive vs Iterative solutions
Memoization and Dynamic Programming
Graphs, definitions, degrees
Implementation of Graphs using Adjacency Matrices
Pseudo code Depth First Search
Pseudo code of Breadth First Search
Filling out a Adjacency Matrix given a graph and weights
Hashing
Linear Probing
Implementations of adding, removing, contains in a hash map
Fill out 2D buckets, Chaining for hash maps
Concurrency, Interference, and synchronization
Runnable, Threads

Topics in Linux:
know the basic command line commands (ls, cd, env, chmod, mkdir, rm, cp, cat, touch, head, tail)
know standard in, standard out, standard error, and how to redirect
know the permission string, and the octal representation
know what ssh, and scp are
know the basic linux filesystem (/home, /etc, /bin, /root)
know the symbols and their representation (., .., backslash, tilde, hidden files, wildcards)