

Syllabus of Computational Thinking

1	Variables, Initialization, Iterators, Filtering, Datatypes, Flowcharts, Sanity of data
2	Iteration, Filtering, Selection, Pseudocode, Finding max and min, AND operator
3	Multiple iterations (non-nested), Three prizes problem, Procedures, Parameters, Side effects, OR operator
4	Nested iterations, Birthday paradox, Binning
5	List, Insertion sort
6	Table, Dictionar
7	Graph, Matrix
8	Adjacency matrix, Edge labelled graph
9	Backtracking, Tree, Depth First Search (DFS), Recursion
10	Object oriented programming, Class, Object, Encapsulation, Abstraction, Information hiding, Access specifiers
11	Message passing, Remote Procedure Call (RPC), Cache memory, Parallelism, Concurrency, Polling, Preemption, Multithreading, Producer Consumer, Atomicity, Consistency, Race condition, Deadlock, Broadcasting

