Day 13

Introduction to Graphs

	List	Matrix
Memory	$O(V+E)$	$O(V \times V)$
Check if there is an edge from u to v	$O(V)$	$O(1)$
Find all adjacent of u	$O(degree(V))$ $O(outdegree(V))$	$O(V)$
Add an Edge	$O(1)$	$O(1)$
Remove an Edge	$O(V)$	$O(1)$

Problem : 1   BFS in Graph

Problem : 2   DFS in Graph

Problem : 3   Detect Cycle in an Undirected Graph
↳ BFS
↳ DFS

Problem : 4   Detect Cycle in an Directed Graph
↳ DFS
↳ BFS