For complete graph, O(E) = O(V^2) → O(logE) = O(logV)

|  |  |  |
| --- | --- | --- |
|  | AL | AM |
| Space | O(V+E) | O(V^2) |
| isNeighbour | O(V) | O(1) |
| All neighbour | O(V) | O(V) |
| DFS/BFS | O(V+E) | O(V^2) |
| Prim | O(V + ElogV) |  |
| Kruskal |  |  |
| Floid Warshal | Not possible | O(V^3) |

If need to use Floid Warshal & DFS/BFS → Use both AL and AM

Think about conversion from 1 graph to another. E.g. from adjM to adjL → O(V^2), adjL to adjM, edgelist etc

BFS vs DFS → Most of the time they are similar in performance but dfs is easier to implement due to recursion