20201136

CSE 221 LAB 03

TASK 05

For both BFS and DFS we have to traverse all the nodes in their worst cases.

Using Adjacency list:

To traverse V number of vertices and E number of edges in a graph, both BFS and DFS ~~algo~~ algorithms have time complexity of $O(V+E)$

Using Matrix:

For v number of vertices the matrix will be $V \times V$.

So time complexity for both the algorithms is $O(V^2)$

We can see from the outputs of task 2 and 3, DFS needs to traverse less than BFS to reach victory road. Hence, DFS gets to the victory road first.