

Lab-3

Task-5

Time complexity of BFS:

Adjacency List =  $O(V+E)$

Adjacency Matrix =  $O(V^2)$

Time complexity of DFS:

Adjacency List =  $O(V+E)$

Adjacency Matrix =  $O(V^2)$

For getting the destination:

BFS

1 2 3 4 5 7 11 6 12

DFS

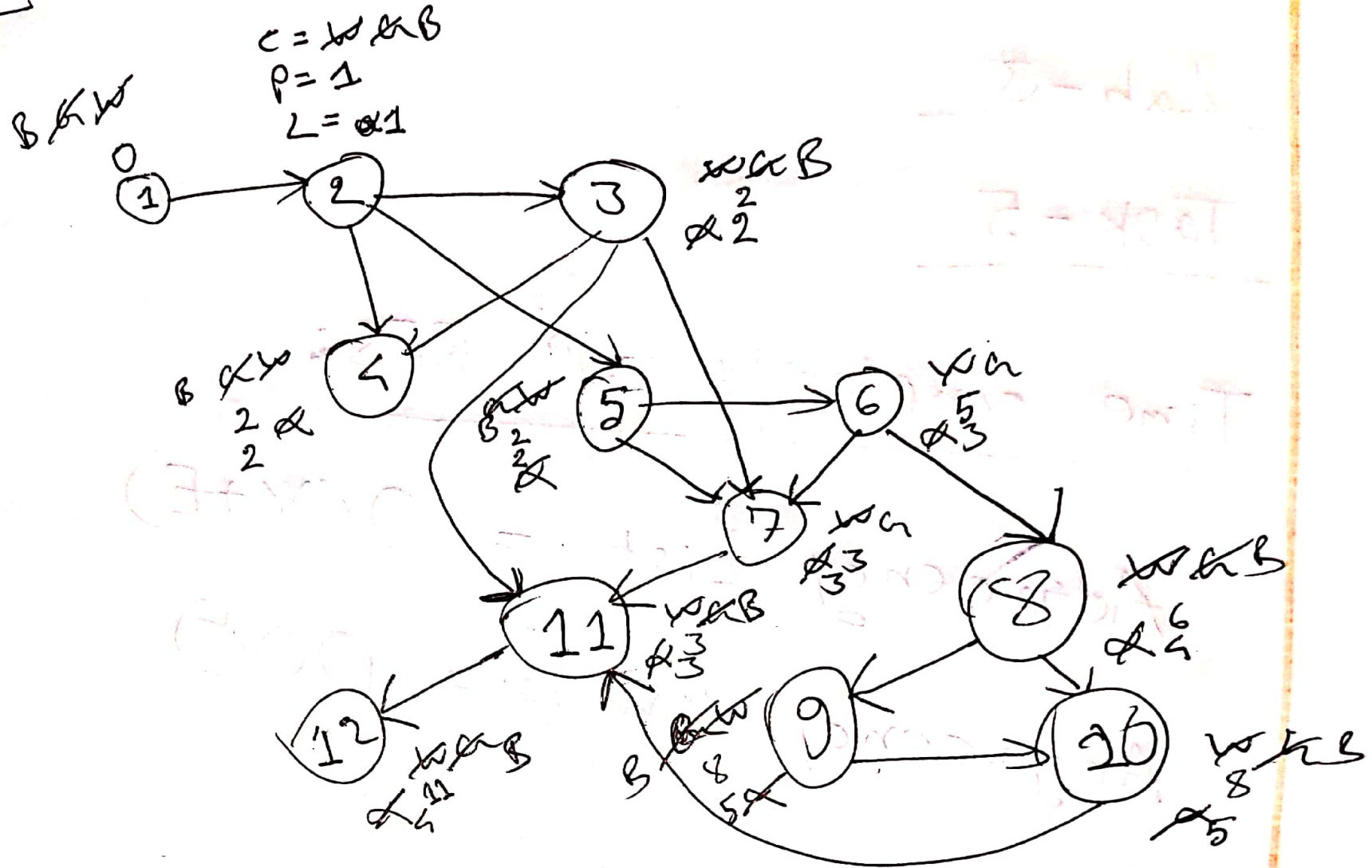
1 2 3 4 7 11  
12

We can see, we get the destination faster through DFS than BFS.

We can see that the time complexity of both BFS and DFS are same.

But, ~~when~~ in this case we get the destination faster by DFS.

BFS



Q = ~~1~~ ~~2~~ ~~3~~ ~~4~~ ~~5~~ ~~7~~ ~~11~~ ~~6~~ ~~12~~ ~~8~~ ~~9~~ ~~10~~