

LAB 11**Marks - 10****Question:**

1. Implement Adjacency Matrix for an undirected Non-weighted Graph .

2. Implement Bfs traversal .

Sample Input and Output**Sample Input 1:**

Number of vertices: 5

Edges: (0, 1), (0, 4), (1, 2), (1, 3), (1, 4), (2, 3), (3, 4)

Adjacency Matrix:

```
0 1 0 0 1
1 0 1 1 1
0 1 0 1 0
0 1 1 0 1
1 1 0 1 0
```

Start vertex for BFS: 0

BFS Traversal starting from vertex 0:

[0, 1, 4, 2, 3]

Sample Input 2:

Number of vertices: 4

Edges: (0, 1), (0, 2), (1, 2), (2, 3)

Adjacency Matrix:

```
0 1 1 0
1 0 1 0
1 1 0 1
0 0 1 0
```

Start vertex for BFS: 1

BFS Traversal starting from vertex 1:

[1, 0, 2, 3]