Name: Satyam Kumar ID:20MCMB22
Graph Lab Assignment

Output of 1st graph using DFS :
There are 5 edges and 5 vertices in 1st graph. 0 is considered as the starting vertex.
Output : 0 1 2 4 3

```
[satyam@Eulerton DSPLab]$ gcc DFS.c -o DFS
[satyam@Eulerton DSPLab]$ ./DFS
Enter the no of vertices 5
Enter the no of edges 5
0 1
0 2
0 3
1 2
2 4
0
0 1 2 4 3
```

Output of 1st graph using BFS :
There are 5 edges and 5 vertices in 1st graph. 0 is considered as the starting vertex.
As vertex 2 is connected to vertex 0 which is level 0 and also connected to 4, which is in level 2.
Hence 2 is inserted more than 1 in queue.

```
[satyam@Eulerton DSPLab]$ ./BFS
Enter the no of vertices 5
Enter the no of edges 5
0 1
0 2
0 3
1 2
2 4
0
0 1 2 3 2 4 4
```

Output of 2nd graph using DFS :
There are 6 vertices and 5 edges in the 2nd graph. 1 is considered as the starting vertex.

Output: 1 2 3 5 6 4

```
[satyam@Eulerton DSPLab]$ ./DFS
Enter the no of vertices 6
Enter the no of edges 5
1 2
1 4
2 3
2 5
5 6
1
1 2 3 5 6 4
```

Output of 2nd graph using BFS :
There are 6 vertices and 5 edges in the 2nd graph. 1 is considered as the starting vertex. Every vertex is not connected with 2 vertex in 2 different levels. All the vertices enters the queue only once.

Output: 1 2 4 3 5 6

```
[satyam@Eulerton DSPLab]$ ./BFS
Enter the no of vertices 6
Enter the no of edges 5
1 2
1 4
2 3
2 5
5 6
1
1 2 4 3 5 6
```