import java.util.HashSet;

import java.util.Set;

public class dfsAdjMatrix{

public static void dfsAdjMatrix(int[][] graph,int start,Set<Integer>visited){

if(visited == null){

visited=new HashSet<>();

}

visited.add(start);

System.out.println(start);

for(int adjacent=0;adjacent<graph.length;adjacent++){

if (graph[start][adjacent]==1&&!visited.contains (adjacent)){

dfsAdjMatrix(graph,adjacent,visited);

}

}

}

public static void main(String[]args){

int[][]graph={

{1,1,1,1},

{1,0,0,1},

{1,0,0,1},

{1,1,1,1}

};

System.out.println("\n DFS using Adjacency Matrix:");

dfsAdjMatrix(graph,0,null);

}

}