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//Solve Rat in a Maze problem using backtracking
public class RatinMaze {
    static int N;
    void printSolution(int sol[][])
    {
        for (int i = 0; i < N; i++) {
            for (int j = 0; j < N; j++)
                System.out.print(" " + sol[i][j] + "
");
            System.out.println();
        }
    }
    boolean isSafe(int maze[][], int x, int y)
    {
        return (x >= 0 && x < N && y >= 0 && y < N && maze[x]
[y] == 1);
    }
    boolean solveMaze(int maze[][])
    {
        int sol[][] = new int[N][N];

        if (solveMazeUtil(maze, 0, 0, sol) == false) {
            System.out.print("Solution doesn't exist");
            return false;
        }

        printSolution(sol);
        return true;
    }
    boolean solveMazeUtil(int maze[][], int x, int y, int sol[][])
    {
        if (x == N - 1 && y == N - 1 && maze[x][y] == 1) {
            sol[x][y] = 1;
            return true;
        }
        if (isSafe(maze, x, y) == true) {
            sol[x][y] = 1;
            if (solveMazeUtil(maze, x + 1, y, sol))
                return true;
            if (solveMazeUtil(maze, x, y + 1, sol))
                return true;
            sol[x][y] = 0;
            return false;
        }
        return false;
    }

    public static void main(String args[])
    {
        RatinMaze rat = new RatinMaze();
        int maze[][] = {{1,0,1,0,0},
                        {1,1,1,1,1},
                        {0,1,0,1,0},
                        {1,1,0,1,1},
                        {0,1,1,0,1}};

        N = maze.length;
    }
}

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        rat.solveMaze(maze);  
    }  
}
```