

```

package p3_submit;
/**
 * Project 3 - Maze
 * @author Youchen Ren
 */
import java.io.*;
public class Project3 {
    public static int [][] maze = new int[10][10];
    public static int [][] temp = new int [10][10];
    public static boolean found = false;
    public static int nr; //new row
    public static int nc; //new column
    public static int count = 0;

    public static void main(String[] args) {
        if(args.length == 0)System.out.println("No file specified.");
        else{
            FileReader theFile;
            BufferedReader inFile;
            String oneLine;
            try{//FileNotFoundException must be caught
                theFile = new FileReader(args[0]);
                inFile = new BufferedReader(theFile);
            }
            /**
             * now read the text file line by line.
             */
            while ((oneLine = inFile.readLine()) != null){
                String numbers[] = oneLine.split(" ");
                for(int i = 0; i <= 9; i++) {
                    for(int j = 0; j <= 9; j++) {
                        maze[i][j] = Integer.parseInt(numbers[j]);
                        temp[i][j] = Integer.parseInt(numbers[j]);
                    }
                    if (i <= 8) {
                        oneLine = inFile.readLine();
                        numbers = oneLine.split(" ");
                    }
                }
            }
            Findway(0, 0, 9, 9);
            if (found == true) {
                for(int i = 0; i <= 9; i++) {
                    for(int j = 0; j <= 9; j++) {
                        System.out.print(maze[i][j]+" ");
                    }
                    System.out.println();
                }
            }
            else {
                System.out.println("\nSorry! No path was founded for this Maze.");
            }
            inFile.readLine();//This line is Empty new line
            System.out.println("\n\n\n\n\n\n\n");
            found = false;
            count = 0;
        }
    }
}

```



```

Start backtracking from [3, 9]
Backtracking from [3, 9] to [3, 8]
Backtracking from [3, 8] to [4, 8]
Backtracking from [4, 8] to [5, 8]
Backtracking from [5, 8] to [5, 9]
Backtracking from [5, 9] to [6, 9]
Backtracking from [6, 9] to [7, 9]
Backtracking from [7, 9] to [7, 8]

```

```

Start backtracking from [8, 8]

```

```

2 1 0 0 0 0 0 0 0 1
2 2 2 1 0 1 0 1 0 1
0 1 2 1 0 1 1 1 1 1
1 2 2 1 0 0 0 1 0 0
1 2 1 1 0 1 0 1 0 1
1 2 2 2 1 1 0 1 0 0
0 0 1 2 2 2 2 1 1 0
0 1 1 0 1 1 2 2 2 0
1 1 0 1 1 1 0 1 2 1
1 0 0 0 0 0 0 1 2 2

```

```

Start backtracking from [3, 6]
Backtracking from [3, 6] to [3, 5]
Backtracking from [3, 5] to [3, 4]
Backtracking from [3, 4] to [2, 4]

```

```

Start backtracking from [0, 5]
Backtracking from [0, 5] to [0, 4]

```

```

Start backtracking from [0, 3]
Backtracking from [0, 3] to [0, 4]
Backtracking from [0, 4] to [1, 4]
Backtracking from [1, 4] to [2, 4]
Backtracking from [2, 4] to [2, 3]
Backtracking from [2, 3] to [2, 2]
Backtracking from [2, 2] to [1, 2]
Backtracking from [1, 2] to [1, 1]
Backtracking from [1, 1] to [0, 1]
Backtracking from [0, 1] to [0, 0]

```

Sorry! No path was founded for this Maze.

```

Start backtracking from [0, 8]
Backtracking from [0, 8] to [0, 9]
Backtracking from [0, 9] to [1, 9]
Backtracking from [1, 9] to [2, 9]

```

Backtracking from [2, 9] to [2, 8]

Start backtracking from [4, 9]

Backtracking from [4, 9] to [4, 8]

Start backtracking from [6, 8]

Backtracking from [6, 8] to [5, 8]

Start backtracking from [6, 6]

Backtracking from [6, 6] to [5, 6]

Start backtracking from [8, 8]

2 2 2 2 1 1 0 1 0 0

0 1 1 2 2 2 2 1 1 0

0 1 1 0 1 1 2 2 2 0

1 1 0 1 1 1 0 1 2 1

1 0 0 0 2 2 2 1 2 0

0 1 0 1 2 1 2 2 2 1

0 0 0 1 2 1 0 1 0 1

0 1 0 1 2 1 1 1 1 1

1 0 1 1 2 1 2 2 2 1

1 0 0 1 2 2 2 1 2 2

Start backtracking from [0, 8]

Backtracking from [0, 8] to [0, 9]

Backtracking from [0, 9] to [1, 9]

Backtracking from [1, 9] to [2, 9]

Backtracking from [2, 9] to [2, 8]

Start backtracking from [4, 9]

Backtracking from [4, 9] to [4, 8]

Start backtracking from [6, 8]

Backtracking from [6, 8] to [5, 8]

Start backtracking from [6, 6]

Backtracking from [6, 6] to [5, 6]

Start backtracking from [4, 5]

Backtracking from [4, 5] to [4, 6]

Start backtracking from [3, 6]

Backtracking from [3, 6] to [4, 6]

Backtracking from [4, 6] to [5, 6]

Backtracking from [5, 6] to [5, 7]

Backtracking from [5, 7] to [5, 8]

Backtracking from [5, 8] to [4, 8]

Backtracking from [4, 8] to [3, 8]

Backtracking from [3, 8] to [2, 8]

Backtracking from [2, 8] to [2, 7]

Backtracking from [2, 7] to [2, 6]

Backtracking from [2, 6] to [1, 6]

Start backtracking from [0, 6]

Backtracking from [0, 6] to [1, 6]
Backtracking from [1, 6] to [1, 5]
Backtracking from [1, 5] to [1, 4]
Backtracking from [1, 4] to [1, 3]

Start backtracking from [2, 3]
Backtracking from [2, 3] to [1, 3]
Backtracking from [1, 3] to [0, 3]
Backtracking from [0, 3] to [0, 2]
Backtracking from [0, 2] to [0, 1]
Backtracking from [0, 1] to [0, 0]

Start backtracking from [2, 0]
Backtracking from [2, 0] to [1, 0]
Backtracking from [1, 0] to [0, 0]

Sorry! No path was founded for this Maze.