Part (a)

public static Position findPosition(int num, int[][] intArr)

{

for (int r = 0; r < intArr.length; r++)

{

for (int c = 0; c < intArr[0].length; c++)

{

if (intArr[r][c] == num)

{

Position newPos = new Position(r, c);

return newPos;

}

}

}

}

return null;

}

Part (b)

public static Position[][] getSuccessorArray(int[][] intArr)

{

Position[][] newArr = new Position[intArr.length][intArr[0].length];

for (int r = 0; r < intArr.length; r++)

{

for (int c = 0; c < intArr[0].length; c++)

{

newArr[r][c] = findPosition(intArr[r][c] + 1, intArr);

}

}

return newArr;

}