

Part A | Q 1:

```
public Digits (int num) {  
    for (int i = 0; i <= num.length(); i++) {  
        this.digitList.add (new Integer (i, i+1));  
    }  
    //end for loop  
    //end constructor method
```

Part B

```
public boolean isStrictlyIncreasing() {  
    boolean temp = true;  
    if (this.digitList.size() == 0) {  
        for (int i = 0; i <= this.digitList.size(); i++) {  
            if (this.digitList.get(i) > this.digitList.get(i+1)) {  
                temp = false;  
            }  
            //end 2nd if  
        }  
        //end for loop  
        //end 1st if statement  
        return temp;  
    }  
    //end method
```

Part A | Q 2:

```
public static Position findPosition (int num, int[] intArr) {  
    for (int i = 0; i < intArr.length; i++) {  
        for (int x = 0; x < intArr[i].length; i++) {  
            if (intArr[i][x] == num) {  
                return position(i, x);  
            }  
        }  
        //end 2nd for loop  
    }  
    //end for loop  
    //end method
```

Part B

```
public static Position[][] getSuccessorArray (int[][] intArr) {  
    Position[][] successorArray = new Position[intArr.length][intArr[0].length];  
    for (int i = 0; i < successorArray.length; i++) {  
        for (int x = 0; x < successorArray[i].length; x++) {  
            successorArray[i][x] = findPosition (intArr[i][x], intArr);  
        }  
        //end 2nd for loop  
    }  
    //end for loop  
    return successorArray;  
    //end method
```