艾法諾科技 - JAVA面試考題

> 應試人：
>
> 面試日期：
>
> 主考官：
>
> 分數：

考題

> 請將答案另外寫在空白紙上

1. Given an array of integers, return indices of the two numbers such that they add up to a specific target. You may assume that each input would have exactly one solution, and you may not use the same element twice.

   example:

   ```
   Given nums = [2, 7, 11, 15], target = 9,

   Because nums[0] + nums[1] = 2 + 7 = 9,
   return [0, 1].
   ```

2. Given an integer, convert it to a roman numeral. Input is guaranteed to be within the range from 1 to 3999.

   Solution:

   ```java
   class Solution {
       public String intToRoman(int num) {

       }
   }
   ```

3. You are given an n x n 2D matrix representing an image.

   Rotate the image by 90 degrees (clockwise).

   Note:

You have to rotate the image in-place, which means you have to modify the input 2D matrix directly. DO NOT allocate another 2D matrix and do the rotation.

Example 1:

```
Given input matrix =
[
  [1,2,3],
  [4,5,6],
  [7,8,9]
],

rotate the input matrix in-place such that it becomes:
[
  [7,4,1],
  [8,5,2],
  [9,6,3]
]
```

Example 2:

```
Given input matrix =
[
  [ 5, 1, 9,11],
  [ 2, 4, 8,10],
  [13, 3, 6, 7],
  [15,14,12,16]
],

rotate the input matrix in-place such that it becomes:
[
  [15,13, 2, 5],
  [14, 3, 4, 1],
  [12, 6, 8, 9],
  [16, 7,10,11]
]
```

Solution:

Java

```java
class Solution {
    public void rotate(int[][] matrix) {

    }
}
```