

# Solve Array

$$\underline{\underline{n = 5}}$$

	0	1	2	3	4
nums	10	11	12	13	14
indexes	2	1	4	0	3

```
int idx = indexes[i];  
int val = nums[i];
```

```
target[idx] = val;
```

Take n as an integer input representing size of both array.

Take n integer inputs for "numbers" array and Then take n integer inputs for array "indexes" where each integer input can be from 0 till numbers.length.

Then create an array of size n and name it target array. From left to right read numbers[i] and index[i], and in the target array at the index index[i], insert the value numbers[i].

```
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int n = scn.nextInt();
    int[] nums = new int[n];
    for (int i = 0; i < n; i++) {
        nums[i] = scn.nextInt();
    }

    int[] indexes = new int[n];
    for (int i = 0; i < n; i++) {
        indexes[i] = scn.nextInt();
    }

    solve(nums, indexes, n);
}

public static void solve(int[] nums, int[] indexes, int n) {
    int[] target = new int[n];

    // main logic
    for (int i = 0; i < n; i++) {
        int val = nums[i];
        int idx = indexes[i];

        target[idx] = val;
    }

    // printing answer
    for (int i = 0; i < n; i++) {
        System.out.print(target[i] + " ");
    }
}
```

Page 22

2nd question

# Update query 1

$$n = 8$$

arr

1	5	2	-4	0	7	10	15
0	1	2	3	4	5	6	7

left = 4  
right = 7  
x = 1

traverse from left index to  
right index and update all  
current values with 'x' variable

```
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int n = scn.nextInt();
    int[] arr = new int[n];
    for (int i = 0; i < n; i++) {
        arr[i] = scn.nextInt();
    }
    int left = scn.nextInt();
    int right = scn.nextInt();
    int x = scn.nextInt();
    updateQuery(n, arr, left, right, x);
}

public static void updateQuery(int n, int[] arr, int left, int right, int x) {
    // main logic
    for (int i = left; i <= right; i++) {
        arr[i] = x;
    }

    → // printing
    for (int i = 0; i < n; i++) {
        System.out.print(arr[i] + " ");
    }
}
```

# Add One

(gmp)

M2

$$n = 8$$

arr

1	5	2	2	0	7	5	<del>6</del>
0	1	2	3	4	5	6	7

15220756

+1

15220757

arr1

2	3	9	9
---	---	---	---

2399

+1

2400

- 1) 12345 → 12346
- 2) 32544 → 32545
- 3) 12349 → 12350
- 4) 1299 → 1300

if num is 9, then update with '0'  
else, increase by 1

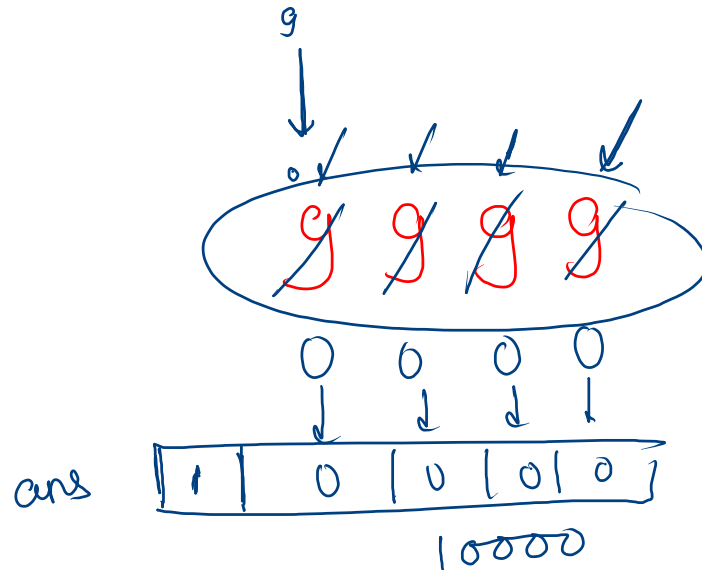
- 5) 9999 → 10000

Note :-

traverse  $n-1$  to  $0$ ,

if current element is  $g$  then update it  
with zero

else, increment current element by  $1$  and  
end the process.



g g g g g  
0 0 0 0 0

g g 2 g g g  
3 0 0 0

rel



code

```
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int n = scn.nextInt();
    int[] arr = new int[n];
    for (int i = 0; i < n; i++) {
        arr[i] = scn.nextInt();
    }

    int[] ans = addOne(arr, n);
    for (int i = 0; i < ans.length; i++) {
        System.out.print(ans[i] + " ");
    }
}

// main logic
public static int[] addOne(int[] arr, int n) {

    for (int i = n - 1; i >= 0; i--) {
        if (arr[i] < 9) { // 0 to 8
            arr[i] += 1;
            return arr;
        }
        if (arr[i] == 9) {
            arr[i] = 0;
        }
    }

    int[] ans = new int[n + 1];
    ans[0] = 1;
    return ans;
}
```