# 31. Next Permutation

## SOLUTION IN JAVA

class Solution {

public void nextPermutation(int[] nums) {

final int n = nums.length;

int i;

for (i = n - 2; i >= 0; --i)

if (nums[i] < nums[i + 1])

break;

if (i >= 0)

for (int j = n - 1; j > i; --j)

if (nums[j] > nums[i]) {

swap(nums, i, j);

break;

}

reverse(nums, i + 1, n - 1);

}

private void reverse(int[] nums, int l, int r) {

while (l < r)

swap(nums, l++, r--);

}

private void swap(int[] nums, int i, int j) {

final int temp = nums[i];

nums[i] = nums[j];

nums[j] = temp;

}

}