Given an integer array nums, return *the****third distinct maximum****number in this array. If the third maximum does not exist, return the****maximum****number*.

**Example 1:**

**Input:** nums = [3,2,1]

**Output:** 1

**Explanation:**

The first distinct maximum is 3.

The second distinct maximum is 2.

The third distinct maximum is 1.

**Example 2:**

**Input:** nums = [1,2]

**Output:** 2

**Explanation:**

The first distinct maximum is 2.

The second distinct maximum is 1.

The third distinct maximum does not exist, so the maximum (2) is returned instead.

**Example 3:**

**Input:** nums = [2,2,3,1]

**Output:** 1

**Explanation:**

The first distinct maximum is 3.

The second distinct maximum is 2 (both 2's are counted together since they have the same value).

The third distinct maximum is 1.

class Solution {

public int thirdMax(int[] nums) {

Arrays.sort(nums);

int en=1, i=nums.length-1;

while(i>0)

{

if(nums[i]!=nums[i-1])

en++;

if(en==3)

return nums[i-1];

i--;

}

return nums[nums.length-1];

}

}

