

DAY 1

Problem 12: Find the Duplicate Number

```
Code:
class Solution {
public:
    int findDuplicate(vector<int>& nums)
    {
        int n=nums.size();
        sort(nums.begin(),nums.end());
        int x=nums[0],i;
        for(i=1;i<n;i++)
        {
            x=x^nums[i];
            if(x==0) break;
            else x=nums[i];
        }
        return nums[i];
    }
}</pre>
```

Output:

