

Find duplicates under given constraints

Given a sorted array having 10 elements which contains 6 different numbers in which only 1 number is repeated five times. Your task is to find the duplicate number using two comparisons only.

Examples:

Input: $A[] = \{1, 1, 1, 1, 1, 5, 7, 10, 20, 30\}$

Output: 1

Input: $A[] = \{1, 2, 3, 3, 3, 3, 3, 5, 9, 10\}$

Output: 3

Input:

The first line of input contains an integer T denoting the no of test cases. Then T test cases follow . Each test case contains 10 space separated values of the array $A[]$.

Output:

For each test case in a new line print the required duplicate element.

Constraints:

$1 \leq T \leq 100$

$1 \leq A[i] \leq 10^5 + 5$

Example:

Input:

2

1 2 4 5 6 9 9 9 9 9

1 2 3 3 3 3 3 5 9 10

Output:

