

Problem Statement

Sherlock is stuck while solving a problem: Given an array A_1, A_2, \dots, A_N , he wants to know if there exists a subset, $B = \{A_{i_1}, A_{i_2}, \dots, A_{i_k}\}$ where $1 \leq i_1 < i_2 < \dots < i_k \leq N$, of this array which follows these statements:

- B is non-empty subset.
- There exists no integer $x(x > 1)$ which divides all elements of B . Note that x may or may not be an element of A .

Input Format

First line contains an integer T which denotes the number of testcases.

T lines follow each containing a testcase: first line of each testcase contains an integer N in one line. Second line of each testcase contains N integers denoting the array A .

Output

Print **YES** if such a subset exists, else print **NO**.

Constraints

$$1 \leq T \leq 10$$

$$1 \leq N \leq 100$$

$$1 \leq A_i \leq 10^5 \forall 1 \leq i \leq N$$

Sample input

```
2
3
1 2 3
2
2 4
```

Sample output

```
YES
NO
```

Explanation

In first testcase, $S = \{1\}$, $S = \{1, 2\}$, $S = \{1, 3\}$, $S = \{2, 3\}$ and $S = \{1, 2, 3\}$ are all the possible subsets which satisfy the given condition.

In second testcase, no non-empty subset which satisfies the given condition exists.