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CODEFORCES
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E. Add Modulo 10

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

You are given an array of n integers $a_1, a_2, \ldots, a_n$

You can apply the following operation an arbitrary number of times:

- select an index i ($1 \le i \le n$) and replace the value of the element a_i with the value $a_i + (a_i \bmod 10)$, where $a_i \bmod 10$ is the remainder of the integer dividing a_i by 10.

For a single index (value i), this operation can be applied multiple times. If the operation is applied repeatedly to the same index, then the current value of a_i is taken into account each time. For example, if $a_i = 47$ then after the first operation we get $a_i = 47 + 7 = 54$, and after the second operation we get $a_i = 54 + 4 = 58$.

Check if it is possible to make **all** array elements equal by applying multiple (possibly zero) operations.

For example, you have an array $[6, 11]$.

- Let's apply this operation to the first element of the array. Let's replace $a_1 = 6$ with $a_1 + (a_1 \bmod 10) = 6 + (6 \bmod 10) = 6 + 6 = 12$. We get the array $[12, 11]$.
- Then apply this operation to the second element of the array. Let's replace $a_2 = 11$ with $a_2 + (a_2 \bmod 10) = 11 + (11 \bmod 10) = 11 + 1 = 12$. We get the array $[12, 12]$.

Thus, by applying 2 operations, you can make all elements of an array equal.

Input

The first line contains one integer t ($1 \le t \le 10^4$) — the number of test cases. What follows is a description of each test case.

The first line of each test case contains one integer n ($1 \le n \le 2 \cdot 10^5$) — the size of the array.

The second line of each test case contains n integers a_i ($0 \le a_i \le 10^9$) — array elements.

It is guaranteed that the sum of n over all test cases does not exceed $2 \cdot 10^5$.

Output

For each test case print:

- `YES` if it is possible to make all array elements equal;
- `NO` otherwise.

You can print `YES` and `NO` in any case (for example, the strings `yEs`, `yes`, `Yes` and `YES` will be recognized as a positive answer) .
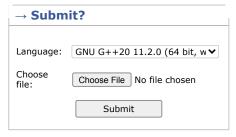
Example

input   Copy

```
10
2
6 11
```

```
3
2 18 22
5
5 10 5 10 5
4
1 2 4 8
2
4 5
3
93 96 102
2
40 6
2
50 30
2
22 44
2
1 5
```

output   Copy

```
Yes
No
Yes
Yes
No
Yes
No
No
Yes
No
```

Note

The first test case is clarified above.

In the second test case, it is impossible to make all array elements equal.

In the third test case, you need to apply this operation once to all elements equal to 5.

In the fourth test case, you need to apply this operation to all elements until they become equal to 8.

In the fifth test case, it is impossible to make all array elements equal.

In the sixth test case, you need to apply this operation to all elements until they become equal to 102.