Question 1 Lucky Ticket

The rascal, Sakuta Azusagawa is superstitious. He has long admired his senior Mai Sakurajima. Today, he finally decided to date his senior. He chooses a romantic movie *Suzume*, and he plans to confess to his senior right after the movie ends. Unfortunately, he failed, blaming the serial number on the ticket. He believes that a **"lucky ticket"** should have at least 5 consecutive numbers that do not repeat.
Your task is to help him to find the lucky ticket.

Input format

The first line consist of 1 integer, n, as the total number of ticket.
Next, there are n line of integer, T, which is the serial number of ticket.

Constraints

- $1 \leq n \leq 10^4$
- $1 \leq T_i \leq 10^6, (1 \leq i \leq n)$

Output format

Output the length of the longest substring without repeating characters and determine whether it is a lucky ticket or not. The output needs to be in:

> `Ticket #i: l, t`
> Whereas i is the i^{th} ticket (starts from 1), l is the the length of the longest substring without repeating characters, t is whether the ticket is lucky (`T`) or not (`F`).

Example

Sample Input

```
3
12345
182819
1234567891234
```

Sample Output

```
Ticket #1: 5, T
Ticket #2: 4, F
Ticket #3: 9, T
```

Explanation

The first ticket has 5 non repeating characters, which are $\{1, 2, 3, 4, 5\}$. Therefore, it is a lucky ticket.
Similarly, the second ticket has 4 non repeating characters, which are $\{2, 8, 1, 9\}$. Therefore, it is not a lucky ticket.
So as the last ticket is true since it has 9 non repeating characters, which are $\{1, 2, 3, 4, 5, 6, 7, 8, 9\}$. Therefore, it is a lucky ticket.