

# Tanu and Head-bob

Problem Code: **HEADBOB**

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Tanu has got interested in signs and gestures that we use for communication. One such gesture is the head-bob.

When we want to signal "Yes" to someone, we move the head up-and-down. For "No", the head is moved left-and-right, rotating about the vertical axis.

There is a peculiar way of gesturing "Yes", commonly seen in India, by moving head sideways (rotating about the forward-back axis). This is called the *Indian head-bob*.

Tanu observed many people on the railways station, and made a list of gestures that they made. Usual "Yes" gesture is recorded as "**Y**", no as "**N**" and Indian "Yes" gesture as "**I**". (Assume no foreigner uses the Indian "Yes" gesture and vice-versa). Identify which of them were Indians, which were not Indian, and which one you cannot be sure about.

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## Input

First line contains  $T$ , number of people observed by Tanu.

Each person is described in two lines. First line of the description contains a single integer  $N$ , the number of gestures recorded for this person. Next line contains a string of  $N$  characters, each character can be "Y", "N" or "I".

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## Output

For each person, print "INDIAN" if he/she is from India, "NOT INDIAN" if not from India, and "NOT SURE" if the information is insufficient to make a decision.

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## Constraints

- **For 30 points:**  $1 \leq T, N \leq 100$
  - **For 70 points:**  $1 \leq T, N \leq 1000$
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## Example

Input:

```
3
5
NNYY
6
NNINNI
4
NNNN
```

Output:

```
NOT INDIAN
INDIAN
NOT SURE
```