Funny String

HackerRank

Problem Statement

Suppose you have a string S which has length N and is indexed from 0 to $N-1$. String R is the reverse of the string S. The string S is funny if the condition $|S_i - S_{i-1}| = |R_i - R_{i-1}|$ is true for every i from 1 to $N-1$.

(Note: Given a string str, str_i denotes the ascii value of the i^{th} character (0-indexed) of str. |x| denotes the absolute value of an integer x)

Input Format

First line of the input will contain an integer T. T testcases follow. Each of the next T lines contains one string S.

Constraints

- $1 <= T <= 10$
- $1 <= \text{length of } S <= 10000$

Output Format

For each string, print `Funny` or `Not Funny` in separate lines.

Sample Input

```
2
acxz
bcxz
```

Sample Output

```
Funny
Not Funny
```

Explanation

Consider the 1st testcase `acxz`

here

```
|c-a| = |x-z| = 2
|x-c| = |c-x| = 21
|z-x| = |a-c| = 2
```

Hence `Funny`.

Consider the 2st testcase `bcxz`

here

```
|c-b| != |x-z|
```

Hence `Not Funny`.