

Yin Yang

Time limit: 1000 ms
Memory limit: 256 MB

Finding the perfect balance is something sought after by many people and in many ways... sometimes even in strings. We'll call a string unbalanced if it has even length and its two halves are equal. Find a string of length N , consisting only of characters `y` and `Y`, such that it has as few distinct unbalanced [substrings](#) as possible.

Your score per test will be computed as $(1 + \frac{1}{10})^{-K}$, where K is e^{F-O} , O is the optimal number of distinct unbalanced substrings and F is the number of distinct unbalanced substrings you have obtained.

Perfectly balanced as all things should be.

Standard input

The first line contains an integer N .

Standard output

Print the answer on the first line.

Constraints and notes

- $1 \leq N \leq 300$
- By e we mean [Euler's number](#), which is ≈ 2.718282

Input

4

Output

yyyY