Database & Analytics Programming Lab
Lecture II

Read an integer N. For all non-negative integers $i < N$, print i^2. See the sample for details.

Input Format

The first and only line contains the integer, N.

Constraints

$1 \le N \le 20$

Output Format

Print N lines, one corresponding to each i.

Sample Input 0

```
5
```

Sample Output 0

```
0
1
4
9
16
```

Read two integers from STDIN and print three lines where:

 1. The first line contains the sum of the two numbers.

 2. The second line contains the difference of the two numbers (first - second).

 3. The third line contains the product of the two numbers.

Input Format

The first line contains the first integer, a. The second line contains the second integer, b.

Constraints

$1 \leq a \leq 10^{10}$

$1 \leq b \leq 10^{10}$

Output Format

Print the three lines as explained above.

Sample Input 0

```
3
2
```

Sample Output 0

```
5
1
6
```

Explanation 0

$3 + 2 \implies 5$

$3 - 2 \implies 1$

$3 * 2 \implies 6$

Given an integer, n, perform the following conditional actions:

- If n is odd, print `Weird`
- If n is even and in the inclusive range of 2 to 5, print `Not Weird`
- If n is even and in the inclusive range of 6 to 20, print `Weird`
- If n is even and greater than 20, print `Not Weird`

Input Format

A single line containing a positive integer, n.

Constraints

- $1 \leq n \leq 100$

Output Format

Print `Weird` if the number is weird; otherwise, print `Not Weird`.

Sample Input 0

```
3
```

Sample Output 0

```
Weird
```

Explanation 0

$n = 3$

n is odd and odd numbers are weird, so we print `Weird`.

Sample Input 1

```
24
```

Sample Output 1

```
Not Weird
```

Explanation 1

$n = 24$

$n > 20$ and n is even, so it isn't weird. Thus, we print `Not Weird`.

We add a Leap Day on February 29, almost every four years. The leap day is an extra, or intercalary day and we add it to the shortest month of the year, February.

In the Gregorian calendar three criteria must be taken into account to identify leap years:

- The year can be evenly divided by 4, is a leap year, unless:
  - The year can be evenly divided by 100, it is NOT a leap year, unless:
    - The year is also evenly divisible by 400. Then it is a leap year.

This means that in the Gregorian calendar, the years 2000 and 2400 are leap years, while 1800, 1900, 2100, 2200, 2300 and 2500 are NOT leap years.Source

Task

You are given the year, and you have to write a function to check if the year is leap or not.

Note that you have to complete the function and remaining code is given as template.

Input Format

Read y, the year that needs to be checked.

Constraints

$1900 \leq y \leq 10^5$

Output Format

Output is taken care of by the template. Your function must return a boolean value (True/False)

Sample Input 0

```
1990
```

Sample Output 0

```
False
```

Explanation 0

1990 is not a multiple of 4 hence it's not a leap year.