# The Poly-tical Question

Input file: standard input
Output file: standard output

Time limit: 2 seconds Memory limit: 256 megabytes

Mewyiddin and Meowhathir are fighting over who gets to become Prime Mew-nister of Miaolaysia. The Prime Mew-nister of Miaolaysia is in charge of doing the polytiks in the nation. A polytik is done by first picking N integer numbers  $c_0, c_1, c_2, \ldots, c_{N-1}$  which represent coefficients of a polynomial equation where  $c_i$  denotes the coefficients of the  $x^i$  term.

$$f(x) = c_0 x^0 + c_1 x^1 + c_2 x^2 + \dots + c_{N-1} x^{N-1}$$

The equation is then evaluated to mod 32000011, the Miaolaysian population in 2020

$$g(x) = f(x) \mod 32000011$$

This number is then somehow useful to the advancement of the nations goals. Whatever they may be.

Because of the lockdown situation caused by the Cowvid-21 outbreak, the Miaolaysian Purrliment has decided to throw democracy out the window and decide their Prime Mew-nister based on who can do polytiks faster. Purrliment will propose a polytik and the candidates will be tasked with providing a value for x.

The candidate that submits the x that yields the highest evaluation gets to be the next Prime Mew-nister. If the evaluations of the candidates are equal, Purrliment is too lazy to go through the process again so it will continue operations without a Prime Mew-nister.

#### Input

The first line of input contains one integer,  $N(1 \le N \le 10^6)$ , the number of coefficients in the polytik.

The second line contains N space-separated integers  $c_0, c_1, c_2, \ldots, c_{N-1} \ (-10^5 \le c_i \le 10^5)$  — the coefficients.

The third line contains two integers  $x_{Mewyiddin}, x_{Meowhathir}(-10^5 \le x_i \le 10^5)$ .

## Output

If Mewyiddin wins, output "Mewyiddin la".

If Meowhathir wins, output "Meowhathir la".

If they draw, output "Nevermind la".

### **Examples**

standard input	standard output
3	Meowhathir la
10 10 10	
1 2	
2	Mewyiddin la
1 1	
-10 10	
3	Nevermind la
10 10 10	
1729 -1730	

#### Note

The polytik equation in Case 1,3 is  $g(x) = [10 + 10x + 10x^2] \mod 32000011$ 

The polytik equation in Case 2 is  $g(x) = [1 + x] \mod 32000011$ 

In Case 1, Mewyiddin's 1 will evaluate to 30, Meowhathir's 2 will evaluate to 70. Meowhathir's evaluation is bigger so Meowhathir becomes Prime Mew-nister.

In Case 2, Mewyiddin's -10 will evaluate to 32000002, Meowhathir's 10 will evaluate to 11. Mewyiddin's evaluation is bigger so Mewyiddin becomes Prime Mew-nister.

In Case 3, Mewyiddin's 1729 will evaluate to 29911710, Meowhathir's -1730 will evaluate to 29911710. Both their evaluations are the same. Purrliment remains without a Prime Mew-nister