# Psycho

# Problem Statement:

Given an integer N, the number N is called "Psycho Number". Psycho Number is calculated as follows:

First, If we factorize N, then we have some prime and their power. Assume that, there are M powers. From M powers, you should count the number of even and odd powers. Then if the number of even power is strictly greater than odd power, then we call the number N is "**Psycho Number**", otherwise the number N is call "**Ordinary Number**".

As for example, if N = 67500 then prime factorization,

 $67500 = 2^2 \times 3^3 \times 5^4.$ 

Count even powers and odd powers. This number have 2 even power(2,4) and 1 odd power (3). Since even power 2 (2,4) is greater than odd power 1 (3), so the number 67500 is a Psycho Number.

### Input:

An integer T (1 <= T <=  $10^6$ ) denoting the number of test cases followed by T lines. Each containing a single integer N ( $1 \le N \le 10^7$ ).

# Output:

For each case print "Psycho Number" or "Ordinary Number".

### Sample Input/Output:

Sample Input	Sample Output
2	Ordinary Number
3	Psycho Number
4	

<u>Note</u> : 0 and 1 is not a psycho number . Psycho 2 : <u>Psycho Function</u> Psycho 3 : <u>Make Psycho</u>

Psycho 4 : Psycho34 (easy)

#### Problem setter: Shipu Ahamed, Dept. of CSE

Bangladesh University of Business and Technology (BUBT)