## 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 $\mathrm{N}=67500$ 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 $\mathbf{T}\left(1<=\mathbf{T}<=10^{6}\right)$ denoting the number of test cases followed by T lines. Each containing a single integer $\mathbf{N}\left(1<=\mathbf{N}<=10^{7}\right)$.

## Output:

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

Sample Input/Output:

| Sample Input | Sample Output |
| :--- | :--- |
| 2 | Ordinary Number |
| 3 | Psycho Number |
| 4 |  |

Note: 0 and 1 is not a psycho number.
Psycho 2 : Psycho Function
Psycho 3 : Make Psycho
Psycho 4 : Psycho34 (easy)

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

## Bangladesh University of Business and Technology (BUBT)

