

A positive integer number is “Special” if it is both a square (eg. 1, 4, 9, 16, 64 ...) and a cube (eg. 1, 8, 27, 64 ...). The smallest special number is 1. Now your job is to write a program that finds whether a number less than 100000000 is special or not. It may be noted that there are only 21 such numbers within this range and these are 1, 64, 729, 4096, 15625, 46656, 117649, 262144, 531441, 1000000, 1771561, 2985984, 4826809, 7529536, 11390625, 16777216, 24137569, 34012224, 47045881, 64000000 and 85766121.

A very childish but legitimate C/C++ solution, which would work for positive numbers not exceeding 15624, is shown below.

```
#include<stdio.h>
int main(void)
{
    int num;
    while(scanf("%d",&num) && num)
    {
        if(num==1 || num==64 || num==729 || num==4096)
            printf("Special\n");
        else
            printf("Ordinary\n");
    }
    return 0;
}
```

A C/C++ code that will work for positive numbers not exceeding 15624

Input

The input file contains at most 1001 lines of input. Each line contains a positive integer less than 100000000. Input is terminated by a line containing a zero.

Output

For each line of input except the last one produce one line of output. This line contains a string (without the quotes) ‘Special’ if the number is special and ‘Ordinary’ if the number is not special. Look at the output for the sample input for details.

Sample Input

```
1
2
64
100
15625
0
```

Sample Output

```
Special
Ordinary
Special
Ordinary
Special
```