

# Problem A

## A simple task



*ACM Central European Programming Contest, Warsaw 2002, Poland*

Given a positive integer  $n$ , find the odd integer  $o$  and the integer  $p$  such that  $n = o2^p$ .

### Example

For  $n = 24$ ,  $o = 3$  and  $p = 3$ .

### Task

Write a program that:

- reads a positive integer  $n$  from the standard input,
- computes the odd integer  $o$  and the integer  $p$  such that  $n = o2^p$ ,
- writes the result to the standard output.

### Input

The first and only line of the input contains exactly one integer  $n$ ,  $1 \leq n \leq 10^6$ .

### Output

The output should contain two integers  $o$  and  $p$  separated by a single space such that  $n = o2^p$ .

### Example

For the input:

24

the correct answer is:

3 3