

UCF “Practice” Local Contest — Aug 27, 2016

Binarize It

filename: binarize
(*Difficulty Level:* Easy)

Professor Boolando can only think in binary, or more specifically, in powers of 2. He converts any number you give him to the smallest power of 2 that is equal to or greater than your number. For example, if you give him 5, he converts it to 8; if you give him 100, he converts it to 128; if you give him 512, he converts it to 512.

The Problem:

Given an integer, your program should binarize it.

The Input:

The first input line contains a positive integer, n , indicating the number of values to binarize. The values are on the following n input lines, one per line. Each input will contain an integer between 2 and 100,000 (inclusive).

The Output:

At the beginning of each test case, output “Input value: v ” where v is the input value. Then, on the next output line, print the binarized version. Leave a blank line after the output for each test case.

Sample Input:

```
3
900
16
4000
```

Sample Output:

```
Input value: 900
1024

Input value: 16
16

Input value: 4000
4096
```