

Problem 4. Game

N players are playing a game with chips. In the beginning of the game each of the players has some chips. In a single move each player chooses any power of the number two and takes the same amount of chips from his chip pile. The winner is the player who manages to take all of their chips with the least amount of moves.

Write a program game that determinates which player will win.

Input: The first line of the input file **game.in** contains a single integer N. The following N lines contain a single integer - the number of chips in the pile of the current player. The players are numerated from 1 to N.

Output: In the output file **game.out** you should print the numbers of the winners in the game in increasing order.

Constraints:

$$1 \leq N \leq 10000$$

Each pile will contain at most 10000 chips.

Example:

game.in	game.out
7	1
81	
480	
7982	
3208	
7720	
2139	
2426	