1043 - Simple Dishes

Description

It has a weight of simple dishes, and weights of 1kg, 2kg, 4kg, 8kg, 16Kg, ..., up to 2^14kg. And he wants to weigh objects whose total weight is less than 2^15 kg. You are required to develop a software that, given the weight of the object find which dishes you need to use to do their weighing. The weights are properly numbered with a value 0 <= Pi <= 14, in the same order they are given, where each has a weight equal to 2^Pi.

Input specification

An integer 1 <= T <= 100 that corresponds to the number of objects. Then in the following T lines, a positive integer greater than zero with the weight of the object in each case.

Output specification

For each object should be printed on one line, separated by a space, the number of each of the weights to be used for the weighing, in ascending order.

Sample input

3

5

73

255

Sample output

0 2

0 3 6

0 1 2 3 4 5 6 7

Hint(s)

Source XXIII Copa Void de Programación -

Yonny Mondelo Hernández

Added by ejaltuna

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