Pythagorean Triplet B

Problem Description

Read an integer N as input and output the first N pythogarean triplets. A Pythogarean triplet like <3, 4, 5> should be counted only once. Meaning we should not count again <4, 3, 5>, <5, 4, 3> etc.Output the triplets in lexicographical order.

A triplet a is lexicographically smaller than a triplet b if in the first position where a and b differ, the triplet a has a smaller element than the corresponding element in b.

Constraints

N <= 100
Each side of the triangle should be less than or equal to 200.

Input

A single integer N.

Output

N lines with 3 space separated integers in each line.
If triplet is <A, B, C> , A < B < C.

Sample Input 1

5

Sample Output 1

3 4 5
5 12 13
6 8 10
7 24 25
8 15 17

Sample Input 2

12

Sample Output 2

3 4 5
5 12 13
6 8 10

7	24	25
8	15	17
9	12	15
9	40	41
10	24	26
11	60	61
12	16	20
12	35	37
13	84	85