

Pythagorean Triplet B

Problem Description

Read an integer N as input and output the first N pythagorean triplets. A Pythagorean 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

$N \leq 100$

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