## Threes

We are looking for sets of positive integers that satisfy the following conditions:

$$x^2 + y^2 = 1 + z^4$$

where $z < x < y$, and $x$, $y$, and $z$ have no factors in common.

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### Task

Write a program to:

1. Find the first 70 sets ordered by increasing $x$, for $x$, $y$ and $z$ which satisfy the above.
2. Find the first 70 sets ordered by increasing $z$, for $x$, $y$ and $z$ which satisfy the above.

The output should be formatted as follows: each line should begin with the set number (i.e., 1 through 70) followed by a single space and then the values of $x$, $y$ and $z$ (also separated from one another by single spaces). The two sets of solutions should be separated by a single blank line. If there are two solutions for a given value of the "primary key" (i.e., $x$ or $z$ depending on which part of the task we're looking at) then they should be in order of the "secondary key" (resp., $z$ or $x$). So (with completely fictitious data), the output might begin something like:

```
1 3 4 5
2 3 6 7
3 5 12 13
```

### Relates to Objectives

1.1 1.2 1.3 1.4 2.1 2.6 3.1 3.5 3.6

(1 point, Individual)