

Jugnu has recently been appointed as the sports captain. The headmaster asked her to form a team for an upcoming table tennis tournament, subject to a few constraints.

Each student of the school is assigned an integer denoting his/her skill level. The headmaster requests Jugnu to form an *indivisible* team of size  $x$ . The team is *indivisible* if it satisfies the following conditions.

- To make the team strong, each member of the team must have a skill level in the range  $[a, b]$ .
- The size of the team must be  $x$ .
- Let  $g_1$  and  $g_2$  be the skill levels of any two distinct players in the team. Then  $g_1$  should not divide  $g_2$ . This is necessary to avoid clashes.

Can you help Jugnu form an indivisible team? Assume that for every  $g$ , Jugnu can always find a student with skill level  $g$ .

### Input Format

The first line contains a single integer  $t$ , the number of test cases. The descriptions of  $t$  test cases follow.

Each test case consists of a single line containing three space-separated integers  $a, b$  and  $x$ .

### Constraints

- $1 \leq t \leq 50$
- $1 \leq a < b \leq 10^4$
- $2 \leq x \leq b - a + 1$

### Output Format

For each test case, print a single line containing  $x$  space-separated integers denoting the skill levels of the team members, or "-1" (without quotes) if it's impossible to build an indivisible team.

Make sure output of each testcase is followed by a new line.

You may output the elements in any order. Any valid solution will be accepted.

### Sample Input 0

```
3
1 3 2
3 9 3
2 5 4
```

### Sample Output 0

```
2 3
3 7 8
```

**Explanation 0**

*Test case 1:* The list of skill levels is  $[2, 3]$ . Notice that neither **2** divides **3** nor **3** divides **2**.

*Test case 2:* There are multiple valid answers, e.g.,  $[3, 4, 5]$ ,  $[3, 5, 7]$ ,  $[3, 7, 8]$ ,  $[5, 8, 9]$ , etc.

*Test case 3:* It is not possible to form an indivisible team.