

### E. Construct The Sum

time limit per test: 5 seconds🕒  
memory limit per test: 256 megabytes  
input: standard input  
output: standard output

You are given two integers  $n$  and  $s$ . You have to find distinct positive integers. Each of them less than or equal to  $n$  and their summation equals to  $s$ , or determine that this is impossible.

**Note:** Don't print any extra spaces.

#### Input

The first line contains a single integer  $T(1 \leq T \leq 100)$ , the number of the test cases.

Each of the following T lines contains two space-separated integers  $n$  and  $s$ . ( $1 \leq n \leq 10^5, 1 \leq s \leq 10^{18}$ ).

#### Output

For each test case, if you could find an answer, print  $k$ , the number of elements in the answer, followed by  $k$  elements of the answer on a single line.

If there is no possible answer, print  $-1$  on a single line.

#### Example

input	Copy
3 5 3 7 10 6 4	
output	Copy
2 1 2 2 3 7 1 4	

#### Assiut University Training - Newcomers

Public

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#### → About Group



[Group website](#)

#### → Group Contests

- Sheet #10 (General Hard)
- Sheet #9 (General medium)
- Sheet #8 (General easy)
- Sheet #7 (Recursion)
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- Contest #3.1
- Sheet #3 (Arrays)
- Contest #2
- Sheet #2 (Loops)
- Contest #1
- Sheet #1 (Data type - Conditions)

#### Sheet #10 (General Hard)

Finished

Practice



#### → About Time Scaling

This contest uses time limits scaling policy (depending on a programming language). The system automatically adjusts time limits by the following multipliers for some languages. Despite scaling (adjustment), the time limit cannot be more than 30 seconds. Read the details by the [link](#).