G - Rats
Input File: RatsIn.txt

A man has purchased N bottles of wine numbered 1 through N, which he plans to serve at his wedding. He has discovered that one of the bottles has been poisoned with a fatal poison that takes 24 hours to act. The poison is fatal to humans and rats. He intends to serve the wine in dishes to several rats, one dish per rat, 24 hours before the wedding to determine which bottle contains the poison. The dishes are labeled 1, 2, 3, etc., and every bottle of wine will be poured into *at least* one dish.

Your task is to determine the *minimum* number of dishes (rats) required to identify the poisoned bottle, and which bottles of wine will be poured into a given dish, D. Assume that the wine from bottle 1 will be poured first into all of its dishes, then wine from bottle 2 will be poured into all of its dishes, etc. In addition, assume that the first dish considered to add wine to is dish 1, then dish 2, then dish 3, etc. (e.g., skip dish 1, add wine to dishes 2 and 3, skip dishes 4 and 5, add wine to dish 6).

Inputs
The first line of input will contain an integer specifying the number of weddings to consider.
Each subsequent line will contain two integers: the number of bottles of wine purchased for a wedding, N, follow by a dish number, D.

Outputs
For each wedding, there will be two lines of output. The first line will contain the minimum number of rats (dishes) required to test the wine for that wedding. The second line will contain the numbers of the wine bottles whose wine would be poured into the D^{th} dish, in wine bottle number order. If the D^{th} dish is empty, output a blank line.

Sample inputs
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3
4 1
16 3
12 4
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Sample outputs
```
3
1 3
5
4 5 6 7 12 13 14 15
4
8 9 10 11 12
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