Tyrion loves wine and women. But too much wine can ruin his night... unless there are many women around him! He considers a night wonderful, if the wine/women ratio is at most 2, meaning that he has maximum two glasses of wine per each woman with him. For example a night with 5 glasses of wine and 2 women is not wonderful $(5/2=2.5$(5/2=2.5 and $2.5>2)$2.5>2), while a night with 2 glasses of wine and 3 women is wonderful $(2/3= 0.667$(2/3= 0.667 and $0.667\leq 2)$0.667≤2).
You are given Tyrion's wine consumption and the number of women with him for nn nights. Can you tell which nights were wonderful for Tyrion?

Input

The first line of the input contains nn $(1\leq n\leq 100)$(1≤n≤100) – the number of nights. The following N lines describe a night. These lines contain two *positive* integers: how many glasses of wine he had $(1\leq g_i\leq 100)$(1≤gi≤100) and how many women were with him $(1\leq w_i\leq 100)$(1≤wi≤100).

Output

The first line should contain a single integer kk – the number of wonderful nights Tyrion had. On the second line print kk numbers in increasing order separated by spaces, which are the indices of the wonderful nights of Tyrion. The indexing starts with 1. (Notice that kk might be 0, then leave the second line empty.)

Example

input

```
6
23 22
8 1
9 5
7 3
2 1
4 8
```

output

```
4
1 3 5 6
```

Note

Explanation: there are 4 nights of Tyrion where the wine/women ratio is not more than 2: the 1st (23/22), 3rd (9/5), 5th (2/1), 6th (4/8). The others, 8/1 and 7/3 are greater than 2.