# 【bzoj1651】[Usaco2006 Feb]Stall Reservations 专用牛棚

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## Description

Oh those picky N (1 <= N <= 50,000) cows! They are so picky that each one will only be milked over some precise time interval A..B (1 <= A <= B <= 1,000,000), which includes both times A and B. Obviously, FJ must create a reservation system to determine which stall each cow can be assigned for her milking time. Of course, no cow will share such a private moment with other cows. Help FJ by determining: * The minimum number of stalls required in the barn so that each cow can have her private milking period * An assignment of cows to these stalls over time

有N头牛,每头牛有个喝水时间,这段时间它将专用一个Stall 现在给出每头牛的喝水时间段,问至少要多少个 Stall才能满足它们的要求

## Input

* Line 1: A single integer, N

* Lines 2..N+1: Line i+1 describes cow i's milking interval with two space-separated integers.

## Output

* Line 1: The minimum number of stalls the barn must have.

* Lines 2..N+1: Line i+1 describes the stall to which cow i will be assigned for her milking period.

## Sample Input

5
1 10
2 4
3 6
5 8
4 7

## Sample Output

4

OUTPUT DETAILS:

Here's a graphical schedule for this output:

Time 1 2 3 4 5 6 7 8 9 10

Stall 1 c1>>>>>>>>>>>>>>>>>>>>>>>>>>

Stall 2 .. c2>>>>>> c4>>>>>>>>> .. ..

Stall 3 .. .. c3>>>>>>>>> .. .. .. ..

Stall 4 .. .. .. c5>>>>>>>>> .. .. ..

Other outputs using the same number of stalls are possible.

## HINT

不妨试下这个数据,对于按结束点SORT,再GREEDY的做法 1 3 5 7 6 9 10 11 8 12 4 13 正确的输出应该是3

## 题解

眼瞎了写了线段树，用差分序列就行了