Dragon

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Dragons are a big nuisance sometimes. Especially Ivancho thinks so, because yesterday he found a gold coin on the ground and right before he could pick it up, an annoying dragon flew past him and stole it (dragons love treasures).

In order to avenge this, Ivancho decided to take not only that coin back, but also all of the treasures the dragon has collected. Attacking a dragon is dangerous, but fortunately, Ivancho knows that when he hits the dragon, he inflicts *Di* units of damage upon it, and Ivancho himself can survive through *Li* units of damage (or, in other words, he has *Li* health points). He also knows that the dragon inflicts *Dd* units of damage per hit and would withstand *Ld* damage units (i.e. the dragon has *Ld* health points).

Help Invancho find out whether he is skilled enough to beat the dragon by making a program called `dragon`, which, given the whole numbers *Li*, *Di*, *Ld* and *Dd*, shows which one of them would win. It is assumed that at each second, they deal damage at the same moment - *Li*, is lowered by *Dd* units and *Li* is lowered by *Di* units. It is possible that they both deal a “lethal” blow to each other at the same second. The one whose health points become less than or equal to 0 faints and is considered to have lost the fight.

Input

At the only life in the file `dragon.in` there are 4 whole integers, separated by one interval each - *Li*, *Di*, *Ld* and *Dd*.

Output

At the only line of the output file `dragon.out`:

- if only the dragon faints, the program must print ”Justice” (without the brackets)
- if both of them faint or only Ivancho does - ”Failure” (again without the brackets)

Constraints

$1 \le Li, Di, Ld, Dd \le 1000$

Example tests

Input (dragon.in)	Output (dragon.out)
1 1 8 8	Failure
11 11 8 8	Justice
11 1 1 11	Failure

Explanation of the third example

Both of them faint at the same moment, because Ivancho deals 1 damage to the dragon, which has 1 health point, but the dragon deals 11 damage to Ivancho, who has 11 health points.