Siena College's 33rd Annual High School Programming Contest
Sponsored by Transfinder
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Gold Problem #2: Off To The Races

Background Information:

In this problem, you will be modeling a race between three runners, **1**, **2** and **3**. They are running to a finish line, which is 100 yards away from the general starting line. Each runner has their own speed (yards per sec). However, some (and possibly all) runners may have a head start.

Your program will be to print the finishing order between runners **1, 2** and **3**. The winner is printed first, followed by the second and third place finishers on the same output line separated by a space. If there is a tie, the runner with who ran further (had the smallest head start) is listed first. If there is a tie and the runners ran the same distance then the smaller number must be listed first in the output.

Programming Problem:

Input: On one input line, six integers: runner **1**'s speed, runner **1**'s starting position, runner **2**'s speed, runner **2**'s starting position, runner **3**'s speed, and runner **3**'s starting position.
Note that a starting position of 0 means the runner needs to run the entire 100 yards. A starting position of 10 means the runner has a 10 yard head start and needs to run 90 yards.
The constant speed will be a positive integer ≤ 20 and the starting position will be a non-negative integer ≤ 99.

Output: The order of finish.

Example 1: Input:
```
6 10 7 0 8 20
```
Output:
```
3 2 1
```

Example 2: Input:
```
5 10 5 0 5 0
```
Output:
```
1 2 3
```

Example 3: Input:
```
1 80 10 0 5 0
```
Output:
```
2 3 1
```

Example 4: Input:
```
5 25 10 0 10 0
```
Output:
```
2 3 1
```