

DocuSign Pre-Phone Screen Coding Problem #3

DocuSign has different sized servers that process documents in its data centers. To load balance jobs across the servers, each job is assigned to a random server such that if server X is three times as big as server Y, then server X gets assigned three times as often as server Y. So server X would be assigned approximately 75% of the time and server Y would be assigned 25% of the time.

Write a program in any programming language that takes server names and sizes as arguments and outputs the name of a random server based on the algorithm described above. For instance:

```
bash-3.2$ program X:3 Y:1
X
bash-3.2$ program X:3 Y:1
Y
bash-3.2$ program X:3 Y:1
X
bash-3.2$ program X:3 Y:1
X
```

There can be any number of servers passed on the command-line:

```
bash-3.2$ program A:3 B:2 C:4 D:4 E:1
C
bash-3.2$ program X:3 Y:1 Z:3
X
```

We're going to run your program 100 times to test if the distribution is correct (approximately the right percentages).