

Starbucks Search (prob4)

Traveling from Greenville, SC to Macon, GA, the BJU Programming Team decided it would be fun to try and visit all the Starbucks along the way. Of course "along the way" could be interpreted many ways. So for the purpose of the programming contest, we shall define it as " ≤ 2 miles of the interstate exit." Your job is to write a program that will give the BJU Programming Team a list of the Starbucks that meet this criteria.

Input

The location of all the Starbucks in SC and GA. Each Starbucks will be on a line by itself in the format:

Name of exit, Distance of exit from Greenville, Distance of Starbucks from exit

Distance of exit from Greenville will be an integer ≤ 500 . *Distance of Starbucks from exit* will be a floating point number with at most 2 digits of precision.

There will be maximum 3000 Starbucks locations. Input is terminated by the string "END" (quotes for clarity). There will be **no** leading or trailing spaces in any of the lines in the input data.

Output

A list, one per line, of all the Starbucks which meet the criteria, in the order in which we will encounter them on our journey to Macon, without backtracking on the interstate. If multiple Starbucks are at the same exit, they should be listed in order of increasing distance from the exit. There will be no two Starbucks at the same exit with the same distance from the exit.

Sample Input

```
Epps Bridge Road,40,1.5
Tiger Blvd,25,4.2
Main Street,25,1.0
Your Street,25,50
Green Street,150,4
END
```

Sample Output

```
Main Street, Exit 25
Epps Bridge Road, Exit 40
```