

Problem 3: Causing A Commotion

There are many annoyances in a typical movie theatre such as people who insist on using distracting, bright cell phones in front of you, and people who won't stop talking behind you. Given this, the best row to sit in is the row in which the total of all the cellphone users in front of it and all the talkers behind it is the minimum over all rows in the theatre. Note that the best row may not be unique, as there may be several rows that achieve this minimum.

Write a program which, given a description of a theatre with r rows and the rows in that theatre with distractions, computes and prints all of the best rows to sit in that theatre along with the number of distractions one will have in each of these rows. Your input will be a textfile in which the first line is the value of r and each subsequent line contains three integers, namely, a row number, the number of talkers in that row, and the number of cell phone users in that row. Rows that have no talkers or cell phone users are not specified in the input textfile. The row at the front of the theatre is row number zero. You may assume that all input files are formatted correctly.

Sample input #1 (available as file "test3a.dat"):

```
11
1 1 5
3 2 4
5 3 3
7 4 2
9 5 1
```

Sample output #1:

```
Best row(s): 1 9
14 distraction(s)
```

Sample input #2 (available as file “test3b.dat”):

```
11
1 1 1
3 2 2
5 3 3
7 4 4
9 5 5
```

Sample output #2:

```
Best row(s): 9
10 distraction(s)
```

Sample input #3 (available as file “test3c.dat”):

```
20
0 0 8
1 7 3
3 0 8
5 5 0
10 0 0
16 1 3
19 7 0
```

Sample output #3:

```
Best row(s): 0
20 distraction(s)
```