DWITE '09 R5 #3 - Summary Diff

Time limit: 2.0s **Memory limit:** 64M

DWITE Online Computer Programming Contest, March 2010, Problem 3

Sometimes, when the files are different, we want to have a summary of how far off they are. In the case of well-formatted data, we might also want to know by how much the values differ. A practical example would be comparing some kind of a usage report against the expected values.

The input will contain 5 test cases. Each set starts with a line having an integer $0 \leq N \leq 5$ and another line with an integer $0 \leq M \leq 5$. Followed by $N + M$ lines with the contents of the two files. There will be a line containing three minus signs `---` after each set.

Each line inside a "file" to be compared is a string-integer pair separated by a single space. The string is a 3 character word (lowercase alpha characters), the integer is a non-negative integer less than 100.

Each "file" is in a sorted order according to the leading string. The string keys in each file are unique.

The output will contain 5 lines, each containing a pair of integer sums, separated by a space. The first integer is the total number of lines missing between two files. The second integer is a sum of the absolute differences in the values of the lines where string keys match.

Notes on the sample below: In the first case, both files have just a single line. The keys are the same, so zero lines are missing, but the values differ by one. In the second case, the first file is missing a line with `baz` while the second file is also missing a line with `foo`, so there is a total of two missing lines. The remaining lines have their values differ by one.

Sample Input

```
1
1
foo 42
foo 41
---
2
2
bar 1
foo 42
bar 2
baz 40
---
```

Sample Output

```
0 1
2 1
```

Problem Resource: DWITE