# Problem 2 – LiliSoft Excel

You will receive **n** and **m –** the dimensions of a matrix. Then on the next **n** lines you will receive **m** elements separated by a **single comma**, which will be the elements of the matrix. When you have filled the matrix you will begin receiving commands in the format: “{row/column} {index}”.

When you receive the command you must summarize all elements corresponding to the row/col which is on the current index, if they are **numbers**, and if they are **strings** you must add to the sum the length of the string and print the final value. You must then start from the very last element of the current row/column and set its value to the **result,** from the previous operation, **sum minus** its current value, if it’s a string, set it to value of **sum minus** string length.

### Input

* On the first line you will receive the dimensions of the matrix **n** and **m.**
* On the next **n** lines you will receive **m** elements.
* On the next several lines you will receive commands until you receive “end”. When you get the “end” command you must end the input.

### Output

* After every command you must print the result sum.
* You must print the matrix with all its elements separated by a space.

### Constraints

* The dimensions will be valid integers in the range [0, 100].
* The elements will be strings containing **ANY** ASCII character except **comma.**
* Allowed time/memory: 100ms/16MB

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| **Input** | **Output** |
| 3 3  20,Lili,20  50,10,50  Bla,Bla,Bla  row 2  column 1  end | 9  20  20 16 20  50 10 50  6 14 6 |