**Count Ingots**

*To create an accurate accounting of our stock, incoming ingots in cargo shipments are numbered.*

Ingots in each consignment are numbered in the row from A1 to Z9 as A1, A2,..., A9, B1, B2, ..., Z9. Each consignment is marked with the number of the last ingot in it. So you can define the quantity of ingots by the number of marks.

You are given a report of daily consignments as number marks written in a string separated by commas. Count the total quantity of ingots. Take the report "A2,B1" for example. Here we can see two consignments with 2 (A2) and 10 (B1) ingots, giving us a result of 12.

**Input:** A daily report as a string.

**Output:** The total quantity of ingots as an integer.

**Example:**

count\_ingots("A2,B1") == 12

count\_ingots("A1,A1,A1") == 3

count\_ingots("Z9,X8,Y7") == 672

count\_ingots("C1,D1,B1,E1,F1") == 140

**Precondition:**

report match with regexp expression "[A-Z][1-9](,[A-Z][1-9])\*"

**How it is used:**

This concept uses a modified numeral system and provides you with a basis for working with strings.

**Daily Reports**

*As we already know for an accurate accounting, all ingots we manufacture are numbered. But days are passing by we're finding that the reports are becoming overwhelming.*

Ingots in each consignment are numbered in the row from A1 to Z9 as A1, A2,..., A9, B1, B2, ..., Z9. Each consignment are marked by the last ingots in it. So you can define the quantity of ingots my marks. Each daily report written as consignments of marks in string separated by commas. So you can count the total quantity of ingots for a day.

The full report contain daily reports for several days. Each report is given with a date in the next format: YYYY-MM-DD, where YYYY is year, MM is month, DD is day. Date and report are separated by whitespace. Each date-report are placed on separated lines.

You are given a full report as a multiline text and two dates. You should calculate the total quantity ingots for the days between given dates (**including**).

For example you are given the next full report and dates:

2015-01-01 A1,B2

2015-01-05 C3,C2,C1

2015-02-01 B4

2015-01-03 Z9,Z9

From: 2015-01-01

To: 2015-01-31

For these dates we see three "good" days: 2015-01-01, 2015-01-03, 2015-01-05.

* 2015-01-01 == 1 + 11 == 12
* 2015-01-03 == 21 + 20 + 19 == 60
* 2015-01-05 == 234 + 234 == 468

So the result is 540.

**Input:** Three arguments. A full report as a multiline string. A start and end date as strings.

**Output:** The total quantity of ingots for daily reports between these days as an integer.

**Example:**

count\_reports("2015-01-01 A1,B2\n"

"2015-01-05 C3,C2,C1\n"

"2015-02-01 B4\n"

"2015-01-03 Z9,Z9",

"2015-01-01", "2015-01-31") == 540,

**Precondition:**

All report lines are correct.

**How it is used:**

String date representation often appears in various reports and documents. This concept is useful for parsing and process documents