URI Online Judge | 1257

**Array Hash**

By TopCoder\* https://urionlinejudge.r.worldssl.net/gallery/images/flags/us.gif USA

**Timelimit: 1**

You will be given many input lines with strings. The value of each character in input is computed as follows:

Value = (Alphabet Position) + (Element of input) + (Position in Element)

All positions are 0-based. 'A' has alphabet position 0, 'B' has alphabet position 1, ... The returned hash is the sum of all character values in input. For example, if input is:

CBA  
DDD

then each character value would be computed as follows:

2 = 2 + 0 + 0 : 'C' in element 0 position 0  
2 = 1 + 0 + 1 : 'B' in element 0 position 1  
2 = 0 + 0 + 2 : 'A' in element 0 position 2  
4 = 3 + 1 + 0 : 'D' in element 1 position 0  
5 = 3 + 1 + 1 : 'D' in element 1 position 1  
6 = 3 + 1 + 2 : 'D' in element 1 position 2  
  
The final hash would be 2+2+2+4+5+6 = 21.

**Input**

The input contains many test cases. The first line of input contains an integer **N** that indicates the amount of test cases. Each test case begin with an integer **L** (1 ≤ **L** ≤ 100) that indicates the quantity of following lines. Each of these **L** lines will contains a string with up to 50 uppercase letters ('A' - 'Z').

**Output**

For each test case print the hash calculated according to the above explanation.

| **Sample Input** | **Sample Output** |
| --- | --- |
| 5 2 CBA DDD 1 Z 6 A B C D E F 6 ABCDEFGHIJKLMNOPQRSTUVWXYZ ABCDEFGHIJKLMNOPQRSTUVWXYZ ABCDEFGHIJKLMNOPQRSTUVWXYZ ABCDEFGHIJKLMNOPQRSTUVWXYZ ABCDEFGHIJKLMNOPQRSTUVWXYZ ABCDEFGHIJKLMNOPQRSTUVWXYZ 1 ZZZZZZZZZZ | 21 25 30 4290 |

<https://www.urionlinejudge.com.br/judge/es/problems/view/1257>

static void Main(string[] args)

{

int N = int.Parse(Console.ReadLine());

while (N-- > 0)

{

int L = int.Parse(Console.ReadLine());

int sum = 0;

//string alfab = "abcdefghijklmnopqrstuvwxyz";

string alfab = "ABCDEFGHIJKLMNOPQRSTUVWXYZ";

for (int i = 0; i < L; i++)

{

string cad = Console.ReadLine();

for (int j = 0; j < cad.Length; j++)

{

int alfabet\_position = alfab.IndexOf(cad[j]);

int element\_input = i;

int position\_element = j;

sum += alfabet\_position + element\_input + position\_element;

}

}

Console.WriteLine(sum);

}

Console.ReadLine();

}