Collections.namedtuple()

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collections.namedtuple()

Basically, *namedtuples* are easy to create, lightweight object types.

They turn tuples into convenient containers for simple tasks.

With *namedtuples*, you don't have to use integer indices for accessing members of a tuple.

Example

Code 01

```
>>> from collections import namedtuple
>>> Point = namedtuple('Point','x,y')
>>> pt1 = Point(1,2)
>>> pt2 = Point(3,4)
>>> dot_product = ( pt1.x * pt2.x ) +( pt1.y * pt2.y )
>>> print dot_product
11
```

Code 02

```
>>> from collections import namedtuple
>>> Car = namedtuple('Car','Price Mileage Colour Class')
>>> xyz = Car(Price = 100000, Mileage = 30, Colour = 'Cyan', Class = 'Y')
>>> print xyz
Car(Price=100000, Mileage=30, Colour='Cyan', Class='Y')
>>> print xyz.Class
Y
```

Task

Dr. John Wesley has a spreadsheet containing a list of student's IDs, $marks$, $class$ and $name$.

Your task is to help Dr. Wesley calculate the average marks of the students.

$$Average = \frac{Sum\ of\ all\ marks}{Total\ Students}$$

Note:

1. Columns can be in any order. IDs, marks, class and name can be written in any order in the spreadsheet.

2. Column names are `ID`, `MARKS`, `CLASS` and `NAME`. (The spelling and case type of these names won't change.)

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Difficulty	Easy
Max Score	20
Submitted By	11407

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Input Format

The first line contains an integer N, the total number of students.

The second line contains the names of the columns in any order.

The next N lines contains the $marks$, IDs, $name$ and $class$, under their respective column names.

Constraints

$0 < N \leq 100$

Output Format

Print the average marks of the list corrected to 2 decimal places.

Sample Input

TESTCASE 01

```
5
ID       MARKS     NAME      CLASS
1        97       Raymond   7
2        50       Steven    4
3        91       Adrian    9
4        72       Stewart   5
5        80       Peter     6
```

TESTCASE 02

```
5
MARKS     CLASS     NAME      ID
92        2         Calum     1
82        5         Scott     2
94        2         Jason     3
55        8         Glenn     4
82        2         Fergus    5
```

Sample Output

TESTCASE 01

```
78.00
```

TESTCASE 02

```
81.00
```

Explanation

TESTCASE 01

Average = $(97 + 50 + 91 + 72 + 80)/5$

Can you solve this challenge in `4 lines of code or less`?

NOTE: There is `no penalty` for solutions that are correct but have more than 4 lines.

Current Buffer (saved locally, editable) Python 3

```
1  n,marks=int(input()),input().split().index("MARKS")
```

```
2  print("{:.2f}".format(sum([int(input().split()[marks]) for _ in
   range(n)])/n))
```

Line: 2 Col: 47

Upload Code as File | Test against custom input | Run Code | Submit Code

You have earned 20.00 points!
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Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Testcase 0 Testcase 1 Testcase 2 Testcase 3

6 Testcases

Input (stdin) Download

```
5
ID          MARKS       NAME
        CLASS
```

Expected Output Download

```
78.00
```

Compiler Message

```
Success
```