

PS. Write a program to compute Root-Mean-Squared (RMS) value,

$$rms = \sqrt{\frac{1}{N} \cdot \sum_{i=1}^N x_i^2}$$

That is to ask a user for (1) a number of values to compute N, (2) get every value and compute the RMS, and (3) report it.

Hint: it is similar to average, but average of squared:

<i>Average</i>	v.s.	<i>RMS</i>
<i>average = summation/N</i>	v.s.	<i>rms = sqrt(sum_squared/N)</i>
<i>summation = x₁ + ... + x_N</i>	v.s.	<i>sum_squared = x₁² + ... x_N².</i>

Hence,

<i>each loop: sum += x</i>	v.s.	<i>each loop: ss += x**2</i>
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Use the PS template. (PS_template.py. The template is only to ensure the exact display format and allows smooth auto-grading.)

Example 1:

```
=====
Number of values:4
value:-10
value:2
value:0.4
value:3.8
RMS = 5.45
=====
```

Here is P5_template.py

```
"""
Write a program to compute Root-Mean-Squared (RMS) value,
rms(x1, x2, x3, ..., xN) = sqrt( (x1^2 + x2^2 + x3^2 + ... xN^2)/N ):
ask a user for (1) a number of values to compute N,
(2) get every value and compute the RMS, and (3) report it.
"""

# Write your code here!

rms = 0

# Do not edit below this line.
print('RMS = {:, .2f}'.format(rms))
```