

[Mean Normalization] Given a group of numbers, X , a group of normalized values, X' , are transformed from X by the equation below:

$$X'_i = \frac{X_i - \bar{X}}{X^+ - X^-}$$

where \bar{X} , X^+ , X^- is the mean, maximum and minimum of all the numbers in X . In the sample input, $X^+ - X^- > 0$.

Write a Python program on the numbers in X , and output the normalized values. Your output number should be rounded to 3 digits in display.

Sample Input	Sample Output
514,324,764,42,120,836,527,935,83,155,453,648,14	0.106,-0.100,0.377,-0.407,-0.322,0.455,0.120,0.563,-0.362,-0.284,0.040,0.251,-0.437
542,914,436,973,605,813,678,237,285,296,372	-0.023,0.482,-0.167,0.562,0.062,0.345,0.161,-0.438,-0.373,-0.358,-0.254
373,520,111,417,954,572,796,897,469,281,931,925,697,905	-0.307,-0.133,-0.618,-0.255,0.382,-0.071,0.195,0.314,-0.193,-0.416,0.355,0.348,0.077,0.324