

## *Python Program*

Write a program that takes as input five numbers and outputs the mean (average) and standard deviation of the numbers. If the numbers are  $x_1$ ,  $x_2$ ,  $x_3$ ,  $x_4$ , and  $x_5$ , then the mean is  $x = (x_1 + x_2 + x_3 + x_4 + x_5)/5$  and the standard deviation is:

$$s = \sqrt{\frac{(x_1 - x)^2 + (x_2 - x)^2 + (x_3 - x)^2 + (x_4 - x)^2 + (x_5 - x)^2}{5}}$$

Your program must contain at least the following functions: a function that calculates and returns the mean and a function that calculates the standard deviation.

Hint: to calculate the square root for a number, import math library and use function sqrt (math.sqrt(number))

Sample output:

```
Enter the first number 3
Enter the second number 8
Enter the third number 2
Enter the fourth number 9
Enter the fifth number 5
Average = 5.4
Standard Deviation = 2.727636339397171
```