

P3. Write a program to compute a multiplication product,

$$Prod = \prod_{i=1}^N x_i = x_1 \cdot x_2 \cdot x_3 \cdots x_N.$$

That is to ask a user for (1) a number of values to compute N, (2) get each value and multiply the value to the product for N times (do loop for input and multiplication), (3) report the calculation.

Use the P3 template. (P3_template.py. The template is only to ensure the exact display format and allows smooth auto-grading.)

Example 1:

```
=====
Number of values:4
value:0.5
value:3
value:1.2
value:4
Product = 7.20
=====
```

Hint: c.f. summation:

<i>Summation</i> $\sum_{i=1}^N x_i$	<i>v.s.</i>	<i>Product</i> $\prod_{i=1}^N x_i$
(1) Set <i>sum</i> = 0 before the loop	<i>v.s.</i>	<i>prod</i> = 1 before the loop;
(2) Each iteration, <i>sum</i> = <i>sum</i> + <i>x</i>	<i>v.s.</i>	each iteration <i>prod</i> = <i>prod</i> * <i>x</i> .

Here is P3_template.py

```
"""
Write a program to compute a multiplication product.
That is to ask a user for (1) a number of values to compute N,
(2) get each value and multiply the value to the product for N times
(do loop for input and multiplication),
(3) report the calculation.
"""

prod = 1

# Write your code here

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