

03.4 - Organisms

Write a program that predicts the approximate size of a population of organisms. The application should allow the user to enter the starting number of organisms, the average daily population increase (as a percentage), and the number of days the organisms will be left to multiply.

Test your program with the data in Table 1. Finally, format your program to match the sample terminal. Your output should exactly match the sample output, character for character, including all white space and punctuation. User input in the sample has been highlighted in Pappy's Purple to distinguish it from the program's output, but your user input does not need to be colored. Save your program as `organisms_login.py`, where login is your Purdue login. Then submit it along with a screenshot showing a run of the test case.

Input			Output	
Start	Rate	Days	Day	Pop.
2.5	30	15	0	2.5000
			1	3.2500
			2	4.2250
			3	5.4925
			4	7.1403
			5	9.2823
			6	12.0670
			7	15.6871
			8	20.3933
			9	26.5112
			10	34.4646
			11	44.8040
			12	58.2452
			13	75.7188
			14	98.4344
			15	127.9647

Table 1: Population test data.

Terminal

```
$ python organisms_login.py
Starting number, in million: 2.5
Average daily increase, in percent: 30
Number of days to multiply: 15
Day    Approx. Pop
0      2.5000
1      3.2500
2      4.2250
3      5.4925
4      7.1403
5      9.2823
6      12.0670
7      15.6871
8      20.3933
9      26.5112
10     34.4646
11     44.8040
12     58.2452
13     75.7188
14     98.4344
15     127.9647
```