

## CS 101A Homework #6

Due: 11/7/2020, 9:00 pm

### Please read the items below carefully:

Create a new Python script file and name it *yourlastname\_homework6.py*, where *yourlastname* is your last name. Save your file in your homework folder on your computer (a folder that you can easily find). When finished, upload your file on Google Classroom using Homework 6 assignment link.

I should be able to run your complete code without errors.

### Task 1

Imagine that you have \$1 in the bank. Each day your money is increasing by 2%. How much money will you have after 365 days? Use for loop to find out.

### Task 2

This time imagine that you start with \$1 and your money is increasing by 3% but every two weeks you are losing 10% of all your money. Use for loop and if statement to find out how much money you will have in the end.

### Task 3

Now consider a more complicated scenario. Once again you start with \$1. Each odd month (January, March, May, July, September, November) your money is increasing by 10% per day but for each even month (the other six) your money is decreasing by 5% per day. In addition, you get \$100 in the beginning of March and May. Use for loop and if statements to do the math and print how much money you have at the end of each month. (For this task, assume that each month is 30 days).

### Task 4

Using for loop, create a multiplication table for values between 1 and 10. Remember that `print(x)` commands prints on a new line unless you use `print(x, end = "")`.

### Task 5\*

Try to make your table look nice. Hint: use if statement to identify if extra spaces should be added to some numbers in the table to make it look something like this:

```
1  2  3  4  5  6  7  8  9  10
2  4  6  8 10 12 14 16 18 20
3  6  9 12 15 18 21 24 27 30
4  8 12 16 20 24 28 32 36 40
5 10 15 20 25 30 35 40 45 50
6 12 18 24 30 36 42 48 54 60
7 14 21 28 35 42 49 56 63 70
8 16 24 32 40 48 56 64 72 80
9 18 27 36 45 54 63 72 81 90
10 20 30 40 50 60 70 80 90 100
```

```
In [4]:
```