

Homework 1

Exercise 1. Use markdown mode in the Jupyter notebook to present your information on top of your homework:

Full name:

Student id:

Class:

Exercise 2. Write a Python program to print the following string in a specific format (see the output). *Sample String* : "Twinkle, twinkle, little star, How I wonder what you are! Up above the world so high, Like a diamond in the sky. Twinkle, twinkle, little star, How I wonder what you are"

Output :

```
Twinkle, twinkle, little star,  
    How I wonder what you are!  
        Up above the world so high,  
        Like a diamond in the sky.  
Twinkle, twinkle, little star,  
    How I wonder what you are
```

Exercise 3. Write a Python program to print the following string in a specific format.

Output:

```
                I'm tabbed in.  
I'm split  
on a line.  
I'm \ a \ cat.  
  
I'll do a list:  
    * Cat food  
    * Fishies  
    * Catnip  
    * Grass
```

(Guide: google seach “Python 3 Escape Sequences”)

Exercise 4. Given a two integer numbers return their product and their sum

Given:

```
number1 = 40
```

```
number2 = 30
```

Expected Output:

The result:

Product: 1200

Sum: 70

Exercise 5. We'll be building a small receipt printing program with the concepts we've learned, in which the output will look like

```
*****
                                Coding Temple, Inc.
                                283 Franklin St.
                                Boston, MA
=====
      Product Name    Product Price
      Books           $49.95
      Computer        $579.99
      Monitor         $124.89
=====
                        Total
                        $754.83
=====

      Thanks for shopping with us today!
```

```
*****
```

Exercise 6. In Exercise 4, we ended up creating borders above and below the information printed out. Try adding a star border on the sides as well now.

Exercise 7. `len()` is a built-in function in python. You can use the `len()` to get the length of the given string, array, list, tuple, dictionary, etc. Find the length of the following string:
Sample String : "Twinkle, twinkle, little star, How I wonder what you are! Up above the world so high, Like a diamond in the sky. Twinkle, twinkle, little star, How I wonder what you are"

Exercise 8. Display "My Name Is James" as "My**Name**Is**James" using output formatting of a `print()` function

Expected Output:

Use `print()` statement formatting to display `**` separator between each word.

For example: `print('My', 'Name', 'Is', 'James')` will display `MyNameIsJames`

So use one of the formatting argument of `print()` to turn the output into `My**Name**Is**James`

(Guide: `help(print)`, ex: `print("My", "name", sep = "--")`, output:?)

Exercise 9. Display float number with 2 decimal places using `print()`

Expected Output:

Display 458.541315 as 458.54

Exercise 10. Use the input command to enter the names and prices of product 1, product 2, and product 3, and then print the receipt as shown in exercise 5.