CS 150
HOMEWORK 4: MORE RECURSION

Create a new Python script file that you will name *yourname_homework4.py* Save this file in a folder on your computer where you will keep all your homework assignments. Write some Python code inside this file that I will be able to run on my computer without errors.

When finished, upload your file in Google Classroom using the Homework 4 assignment link. Don't forget to add comments at the beginning of each task and throughout your code for clarity.

The last two problem, you don't need to use recursion.

Tasks

1. Write a recursive function to reverse a given string.

2. Write a recursive function that adds the sum of reciprocals of the positive integers. Given a number n, the function returns the sum
$$1 + \frac{1}{2} + \frac{1}{3} + ... + \frac{1}{n}$$

3. Write a program that prints out the 10x10 multiplication table.

4. Do you know about pig latin? Whenever you encounter a vowel in a word, you add 'p' followed by the vowel. Let's say Eric writes a sentence in pig latin. You want to decrypt his message by skipping over these additions. Write a program that decrypts a message in pig latin.