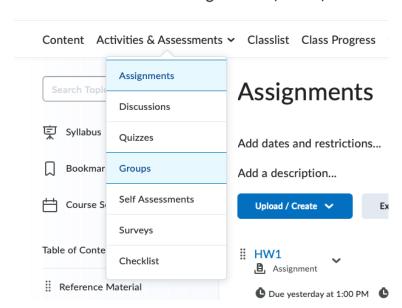
## Peer grading is due on Thursday Oct 6th, 1 pm.

Please go to "Activities & Assessments" -> "Groups" and download grading materials from group locker. You will be assigned 4-5 students' notebooks for grading. Please put the scores for each submission into the attached Excel spreadsheet and submit it under assignment "HW1 peer grading".



↑ IGP 8001-06 Bioregulation I (2022F)

# Homework 1 Grading Rubric Each question is worth 10 points

#### **Question 1**

**Key:** Test with a word with a vowel and test with a word that doesn't have a vowel (i.e. Apple: The word has a vowel. There are 2 vowels. The first vowel is at index 0. The indexes of all vowels are [0, 4]

Myths: There are no vowels in the word.)

- 1. Use Python to take an input word from the user and determine if the word has a vowel (A, E, I, O, U, a, e, i, o, u) in it. Print a message to the user telling them if their word has a vowel in it or not.
  - 10 pts: Code runs and correct answer
    - o -1 pt:
      - Code runs; however, the answer is incorrect
      - Correct answer stated; however, code does not run for grader
    - +1pt if the code was commented in a way that made it really easy for you to follow and understand

- 5pts: Lowest score possible, if an attempt was made; however, the answer is incorrect and the code doesn't work or is in pseudo-code.
  - Example of pseudo-code might be a comment with what the student wanted to do, but didn't know the syntax or how to code it

## Extra goals:

- +1 pt: Count the number of vowels in the word.
- +1 pt: Find the index of the first vowel.
- +1 pt: Find the indexes of all vowels.

0 pts: No answer provided

#### **Question 2**

**Key:** Test with a number divisible by 7 (7, 14, 21, 28....) / Test with a number NOT divisible by 7

2. Use Python to take an input from the user and determine if it is divisible by 7. Print a message to the user telling them if their number is divisible by 7.

Extra goal: write a script that checks if a number is divisible by 7 using Chika's test: take the last digit off a number, multiply it by 5 and add it to the remaining number, and repeat until the number is <10 or 49. If the number is 7 or 49, it is divisible by 7.

- 10 pts: Code runs and correct answer
  - -1 pt:
    - Code runs; however, the answer is incorrect
    - Correct answer stated; however, code does not run for grader
  - +1 pt if the code was commented in a way that made it really easy for you to follow and understand
- 5pts: Lowest score possible, if an attempt was made; however, the answer is incorrect and the code doesn't work or is in pseudo-code.
  - Example of pseudo-code might be a comment with what the student wanted to do, but didn't know the syntax or how to code it

#### Extra goals:

• +1 pt: Uses Chika's test

0 pts: No answer provided

#### **Question 3**

**Key:** 225851433717 and the index is 56

The Fibonacci sequence is generated by adding the previous two terms, starting with 0 and 1. The first six elements are 0, 1, 1, 2, 3, 5. What is the greatest element of the Fibonacci sequence that is less than 268 billion (268,000,000,000), and what is its index, knowing that 0 is at index 0 and 1 is at index 1?

- 10 pts: Code runs and correct answer
- -1 pts:
  - Code runs; however, the answer is incorrect
  - Correct answer stated; however, code does not run for grader
- + 1 pts: If code was clearly commented in a way that made it really easy for you to follow and understand
- 5 pts: Lowest score possible, if an attempt was made; however, the answer is incorrect and the code doesn't work or is in pseudo-code.
  - Example of pseudo-code might be a comment with what the student wanted to do, but didn't know the syntax or how to code it

0 pts: No answer provided

#### Extra goals:

+1 pts: Find the sum of even numbered Fibonacci numbers that are less than 4 million (**Key is 4613732**)

### **Question 4 (Bonus Question):**

**Key:** As a test - you can input the number 20 and should get 5 Bonus Question. Use Python to take an input from the user and find the greatest prime factor of the number the user input. Find all the prime factors of the input number.

- +1 pts: Code runs and correct answer
- +1 pt if the code was commented in a way that made it really easy for you to follow and understand