

For each of the following questions, please submit your code and a screenshot of the output. Note that for some questions, there are better (or worse) ways to accomplish a task, and that you should try to find the best solution! Please use comments to indicate which question you are addressing, and to describe what you are doing.

- (1) Write a program that carries out the following tasks:
 - a. Make a list of your 8 favourite organisms, capitalizing the first letter of each. Print out the name of each organism, followed by " is one of my favourite creatures!".
 - b. Print out the list in all caps, then in all lower case.
 - c. Print out the names of the first and last organisms on your list, separated by a tab.
 - d. Print out the name of every second organism in your list.
 - e. Make a new list that names the same organisms as the first list, but in the reverse order. Print out the new list.
- (2) Make two lists, one giving the names of three scientists, and the other giving the names of your three favourite foods. Using loops, print statements asking each scientist whether they like each food.
- (3) Write a program that carries out the following tasks:
 - a. Using a loop, make a list of the first 20 Fibonacci numbers. If you don't know what a Fibonacci number is, look it up! Print out the list. (This may be tricky. You are allowed to specify the first two numbers of the sequence)
 - b. Using the list generated in 2(a), make a list of the square roots of the first 20 Fibonacci numbers, using a `for` loop. Print out this new list.
 - c. Using the list generated in 2(a), make a list of the square roots of the first 20 Fibonacci numbers, using list comprehension. Print out this list.
 - d. Find the average of the third through seventh Fibonacci numbers, and print it out.
 - e. Again find the average of the third through seventh Fibonacci numbers, but in a different way than you did it in 2(d). Print it out.