

For each of the following programming tasks, write a solution in Python and some other language of your choosing. Slight modifications to the task may need to be made based on the other language that you choose (e.g., maybe the language doesn't have built-in support for *lists*; in that case choose an appropriate implementation based on what that language does offer). Try to use structures native to the language that your writing in (i.e., some languages more naturally use recursion rather than iterations/loops).

After you have solved each of the tasks in both languages, write a summary comparing the two languages in terms of readability and writability (you can also mention reliability if you'd like).

Your submission should be a lab report in PDF format, with a title page including your name, the course number and name, and the date. Then show the code for each task in both languages, (neatly formatted), and then finally your comparative summary.

You might find the online coding environment replit.com useful, as you can code in a variety of languages in your browser without installing anything on your computer.

Task 1. Write a Python procedure `printall(list)` to print all elements in a list of lists, with each element on its own line. For example, `printall([[1,2], [3,4,5], [6,7,8,9]])` would print the numbers 1-9 on consecutive lines.

Task 2. Write a Python function `kalkul(n)` to calculate the following summation for non-negative integer values of n :

$$kalkul(n) = \left(\sum_{i=1}^n \frac{i}{i+1} + \frac{n+1}{n+2} \right)$$

expected outputs:

`kalkul(1)` → 1.1666666666666665

`kalkul(2)` → 2.6666666666666665

`kalkul(3)` → 4.3166666666666666

`kalkul(4)` → 6.0500000000000001

Task 3. Write a Python function `dsum(n)` to calculate the following summation for non-negative integer values of `n`:

$$dsum(n) = \sum_{i=1}^n \sum_{j=1}^n 3i$$

expected outputs:

`dsum(1)` → 3

`dsum(2)` → 18

`dsum(3)` → 54

`dsum(4)` → 120