Lab 4 – Python Programs with Repetitions

Task 0 - Get Organised.

- Create a new folder lab4 in your folder labs.

Task 1 – Invest over some years

Suppose that you have an initial amount of money "*amount*" you invest over a number of years "*nrYears*". You have to write a Python program that prints the investment details for these years. This task is to practice the for statement to repeat for *nrYears* 1) calculate the profit and the accumulated amount 2) print these elements 3) prepare the next iteration / year.

- Analyse the problem to find the inputs, outputs and how to solve it.
- Deal with the inputs.
- For nrYears do
    - Calculate the profit
    - Calculate the accumulated amount
    - Print the initial amount, profit and accumulated amount
    - What will be the initial amount for next year?

Task 2 – Digits of a number.

This program requires you to find all digits of an integer number. More or less you have to implement the code from the lecture.

- Analyse the problem and find the inputs, outputs, and how to solve it.
- Input the number.
- Repeat while possible
    - Find the last digit of the number.
    - Remove this digit from the number.
    - Print the digit or store it into a list
- Print how many digits the number has.