## Week 1: Day 4 - Exercises & Practice

Today is mainly a practice day, to use everything we have learned so far.

We cover one new topic, that is basic file I/O (input output) operations.

## File I/O exercises:

- 1. Mean exercise: read in the values from *numbers.txt*, calculate and print out the mean. Do this in two ways, the first way by opening and explicitly closing the file, and the second way with the with statement.
- 2. Average rainfall exercise: read in the average rainfall values from *rainfall.txt* and write them into another file *rainfall\_months.txt* that puts the average rainfall into full sentences. So, for each line you would have 'The average rainfall in [month] was [value]'.

The review exercises we can do are these first four from Rosalind. We will go through them in class, but I recommend you try to do exercise 4 on your own as well. It nicely wraps up what we have learned so far.

- 1. <a href="https://rosalind.info/problems/dna/">https://rosalind.info/problems/dna/</a>
- 2. <a href="https://rosalind.info/problems/rna/">https://rosalind.info/problems/rna/</a>
- 3. <a href="https://rosalind.info/problems/revc/">https://rosalind.info/problems/revc/</a>
- 4. <a href="https://rosalind.info/problems/gc/">https://rosalind.info/problems/gc/</a>: this exercise is the most complex encountered so far. Definitely worth trying out, because it forces you to use almost everything learned in the course up until this point.