# Week 4 - Sorting and Searching Algorithms

This lab sheet will introduce two algorithms from computer science. After this session you will be able to sort and search lists using the two following algorithms:

* Insertion and Bubble sort algorithm;
* Binary search.

## Sorting Algorithms

1. **TICKABLE** Sorting a list by hand (sorting a list in python)
2. **TICKABLE** Code for insertion sort.
3. Pseudo code for bubble sort asking student to code it themselves.
4. Timeing module to compare both of the above algorithms on a series of data files...

## Searching algorithms

1. **TICKABLE** Search a list by hand.
2. **TICKABLE** Code for iterative binary search.
3. Code for recursive binary search.