Lab 3 – Python Programs for Testing

Task 0 - Get Organised.

- Create a new folder lab3 in your folder labs.
- Download the program equation from last week.
- Put in place some tests for when the following cases:
  - b**2-4*a*c > 0 ➔ real and distinct solutions
  - b**2-4*a*c == 0 ➔ real and similar solutions
  - b**2-4*a*c <0 ➔ complex solutions

Note: you will have to use an if-elif statement.

Task 1 - Do some testing.

With this task you should practice the if statement to find the maximum and minimum of 4 numbers.

- Recall that we have done the program to find the max of 4 numbers.
- Change this program to find both max and min.
  - Work with three more variables min1, min2, min.
  - Find the min1 and min2 as the minimum values of the first and last two elements.
  - Find the min of min1 and min2.

Task 2 - Max, Max.

This program requires you to read 4 numbers and to find the biggest and second biggest values.

- Start from the previous program.
- After you find max1, min1, max2 and min2 you should:
  - Compare max1 and max2 to find the biggest element.
  - For the second biggest you should compare the defeated max with its potential opponent.
  -