

# Computer Programming 2

## Test1

27/02/2023

- You have 2 hours to complete the assignment.
- If the code does not compile, the exercise won't be accepted for submission.
- Some tests are provided to check if your code is correct. You cannot modify the tests!!
- Code is expected to be readable, clean and optimal.
- A skeleton of the exercise is provided. Do not modify the code that is marked with "Do not modify"
- To check if your code is correct, you can write the code you need in the main() of the file main.cpp, but leave it empty before submitting the exam!
- Inside the code, replace "INSERT YOUR NAME HERE" with your name and last name.
- When you finish, ZIP the whole folder with a filename called "lastname\_name.zip" and upload it to the "Test 1" delivery folder

### Exercise 1 (2 points)

Change the Method DealDoubleDamage so that the HealthPoints are reduced by twice the number provided by damage. The damage should not be changed, except in the local function. So the code in the method Ex1() should print out

79  
10

you are not allowed to change any code of Ex1(), only DealDoubleDamage.

### Exercise 2 (6 points)

a)

- Create an array of size 10 on the heap. Remember to delete it when not used anymore
- Make a function that sets the value of the elements of the array as follows:

10    9    8    7    6    5    4    3    2    1

**b)**

- Complete function that returns the sum of the elements from start to end. This function has return
  - Calling GetSum(array,10,1,4)

10   9   8   7   6   5   4   3   2   1

should give 30

- Calling GetSum(array,10,9,9)

10   9   8   7   6   5   4   3   2   1

should give 1

- The function must check that no value outside the array is summed and return -1 if this is done
  - Calling GetSum(array,10,9,9)
    - should return -1

should be (array,10,10,9)  
or anything that give an out of bounds error

### Exercise 3 (2 points)

- Assign the address of num to the pointer ptr.
- Change the value where ptr points to to the value of anotherNum (42)