GROUP EXERCISE (G1)

Date: March 2nd 2017

Score: ...../ 5

Submit the report (pdf/doc) of your group to Moodles
Deadline: 23h55' Thursday, Mar 13th 2017
Do not forget to include your group information on the report!

Group name:.....

1. GROUP INFORMATION

No.	Student ID	Name
1		
2		
3		
4		

2. QUESTIONS

Implement the following sorting algorithms using C/C++:

1. Insertion sort
2. Mergesort
3. Quicksort
4. Bonus point: Radix sort/Counting sort

Run each of the above algorithms 6 times with different input size *n* as follow:

1. *n* = 10.000 (sorted integers from 1 to 10.000) x 1 time
2. *n* = 10.000 (reverse sorted integers from 10.000 to 1) x 1 time
3. *n* = 10.000 (randomly chosen integers from 1 to 10.000) x 10 times
4. *n* = 20.000 (randomly chosen integers from 1 to 20.000) x 10 times
5. *n* = 30.000 (randomly chosen integers from 1 to 30.000) x 10 times
6. *n* = 5.000.000 (randomly chosen integers from 1 to 5.000.000) x 10 times

Compare and report the running time (in real time unit: ms, seconds, …) of each algorithm (using table and chart). Write some comments about the results.