**Compulsory 2**

The submission should be in the format Surname\_Name\_Compulsory2 on Canvas. The file should be a PDF file including the following:

* ~~Link to the GitHub repository (public!) with the code and project files.~~
* Description of the algorithms chosen, how they work, and why you have chosen an iterative/recursive approach to their implementation.
* Search for the terms Time Complexity and Space Complexity, and specify what the Time and Space complexity is for each one of the selected algorithms is, and why.
* ~~The results in milliseconds of those algorithms sorting 10, 100, 1000 and 10000 elements (use integers).~~
* Reflection on which of those algorithms and approaches is best and why. Define why you believe that is best (is it because it takes less time, less memory, ease of implementation...?).

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| **Algorithm** | **Int Amount and Time Taken (milliseconds)** |
| Selection Sort | Int = 10, Time Taken = 0 ms  Int = 100, Time Taken = 0 ms  Int = 1000, Time Taken = 2 ms  Int = 10000, Time Taken = 231 ms |
| Merge Sort | Int = 10, Time Taken = 0 ms  Int = 100, Time Taken = 0 ms  Int = 1000, Time Taken = 1 ms  Int = 10000, Time Taken = 13 ms |
| Quick Sort | Int = 10, Time Taken = 0 ms  Int = 100, Time Taken = 0 ms  Int = 1000, Time Taken = 0 ms  Int = 10000, Time Taken = 2 ms |