

Home Work 1

In this homework, you are going to compare practical run times of merge sort and insertion sort algorithms. Please bring your computers to the next lesson 19.03.2018 for homework evaluation. Any programming language and platform is allowed to be used like C, C++, C#, Java, Python etc

Steps

- 1: Create an array or a list
- 2: Insert 100,000 randomly generated integers to this list or array
- 3: Code merge sort and insertion sort algorithms
- 4: Sort this list in each algorithm 5 times and calculate the algorithm run times averages
- 5: Compare average run times and print each one of them to the screen

Code flow

Create an integer array or a list

Insert 100,000 randomly generated integers

Start timer

For loop $i=0$ to $i<5$

Call insertion sort method and give as an input the list

End timer

Save run time into a variable

Start timer

For loop $i=0$ to $i<5$

Call merge sort method and give as an input the list

End timer

Save run time into a variable

Print each functions average run times to the screen