Report of sorting algorithms

Insertion sort
We tested on three different computers the insertion sort algorithm on the 20'000'000 records of the csv file (record.csv).
Those are the results of the sorting:

Computer	Chipset	Sorting time by Field1	by Field2	by Field3
iMac 27" (2013)	Intel i5 quad core	>10 min	>10 min	>10 min
MacBook Pro 13" (2011)	Intel i5 dual core	>10 min	>10 min	>10 min
MacBook Pro 13" (2016)	Intel i5 dual core	>10 min	>10 min	>10 min

We obtained these results because the complexity of the algorithm, in the average case, is $O(n^2)$.

Selection sort
We tested on three different computers the selection sort algorithm on the 20'000'000 records of the csv file (record.csv).
Those are the results of the sorting:

Computer	Chipset	Sorting time by Field1	by Field2	by Field3
iMac 27" (2013)	Intel i5 quad core	>10 min	>10 min	>10 min
MacBook Pro 13" (2011)	Intel i5 dual core	>10 min	>10 min	>10 min
MacBook Pro 13" (2016)	Intel i5 dual core	>10 min	>10 min	>10 min

We obtained these results because the complexity of the algorithm, in the average case, is $O(n^2)$.

Quick sort
We tested on three different computers the quick sort algorithm on the 20'000'000 records of the csv file (record.csv).
Those are the results of the sorting:

Computer	Chipset	Sorting time by Field1	by Field2	by Field3
iMac 27" (2013)	Intel i5 quad core	17 sec	9 sec	10 sec
MacBook Pro 13" (2011)	Intel i5 dual core	22 sec	44 sec	104 sec
MacBook Pro 13" (2016)	Intel i5 dual core	19 sec	18 sec	26 sec

We obtained these results because the complexity of the algorithm, in the average case, is $O(nlogn)$.