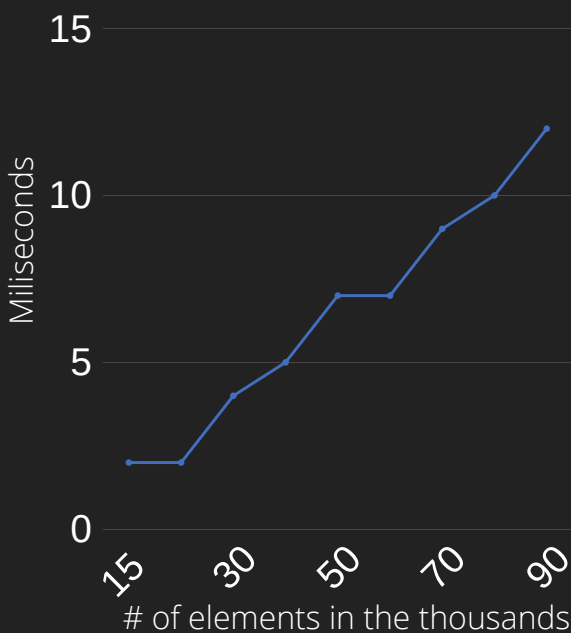


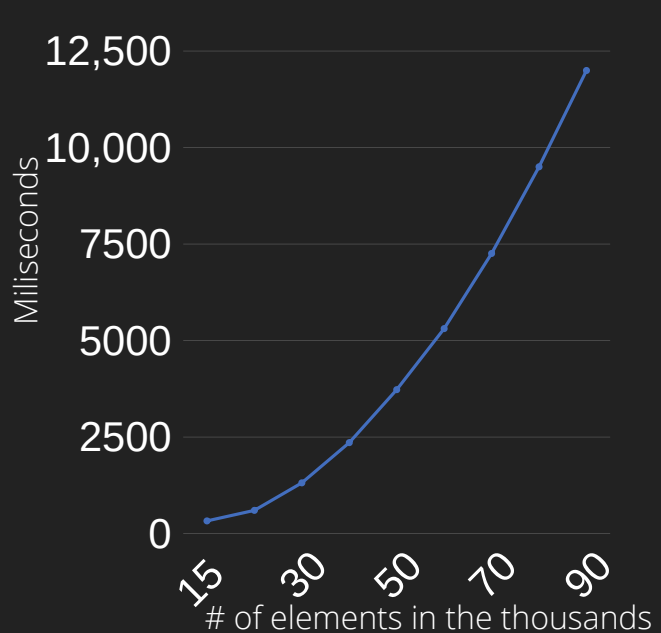
Sort the array!

A MERGE AND SELECTION SORT COMPARISON

MERGE SORT



SELECTION SORT



Implementation time?

MERGE > SELECTION
MERGE IS: RECURSIVE
SELECTION IS: ITERATIVE



MERGE SORT IS WAY
FASTER THAN
SELECTION SORT

BUT WHY? BIG O CAN EXPLAIN

Maths

Merge: $O(n \log n)$
Selection: $O(n^2)$

In english please?

$O(n \log n)$ = Lamborghini
 $O(n^2)$ = A turtle with 1 leg

SO, WHICH ONE SHOULD I IMPLEMENT?

DO YOU HAVE
LARGE AMOUNT OF
DATA?
YES: MERGE
NO: MERGE

$O(n^2)$ ALGORITHMS ARE NOT VERY
EFFICIENT, TRY ALWAYS USING
 $O(n \log n)$ OR FASTER



START SORTING NOW!

