# Iterative sorting!

## WHICH ITERATIVE ALGORITH IS BETTER?

### BUBBLE SORT

Miliseconds

50,000
40,000
30,000
20,000
10,000
0

1  20  40  60  80  99

# of elements in the thousands

### SELECTION SORT

Miliseconds

12,500
10,000
7500
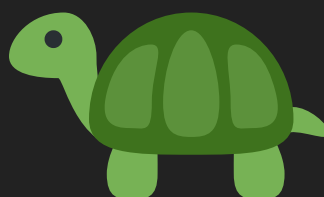5000
2500
0

15  30  50  70  90

# of elements in the thousands
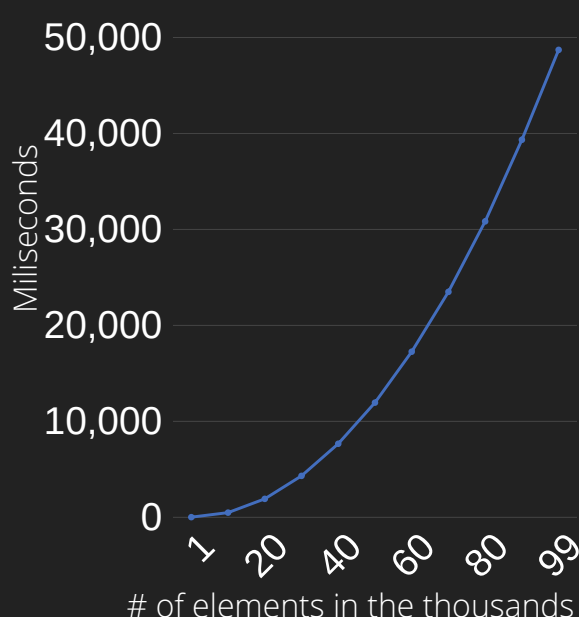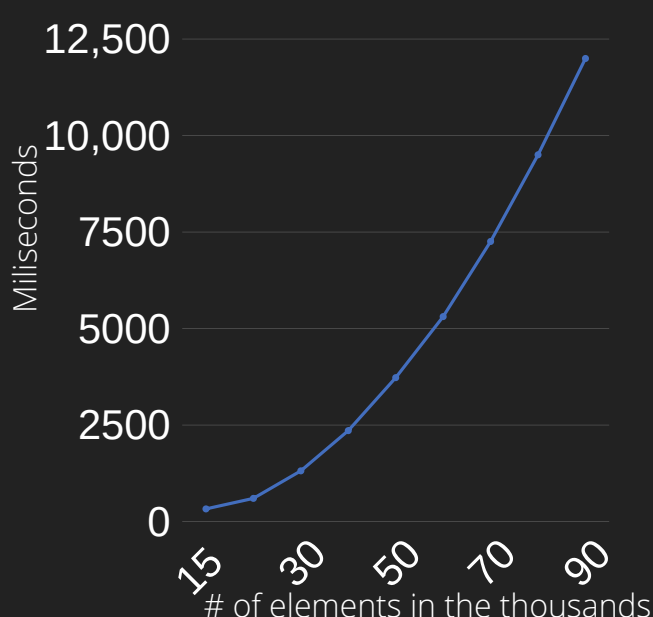
## Selection is faster

**BUBBLE SORT TOOK WAY MORE TIME THAN SELECTION SORT**

**BUBBLE SORT IS VERY SLOW COMPARE TO SELECTION WHICH IS ALREADY SLOW**

## IMPROVING BUBBLE SORT?

### Adding a flag

You can add a flag for the sorting to stop when there where no swaps

### Did it work?

It only really improves if the array is already sorted.
Becomes: 0(1)

## SO, SHOULD I BE USING BUBBLE SORT?

**THERE ARE OTHER EASY TO IMPLEMENT ITERATIVE ALGORITHMS, BETTTER USE THOSE**

## HOPE YOU LEARN SOMETHING