

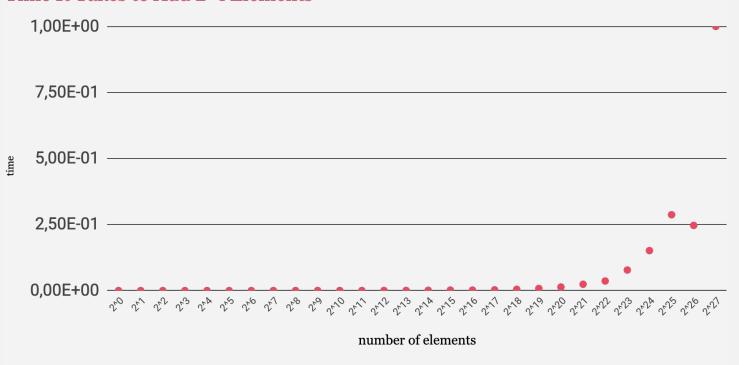
DESCRIPTION

This presentation compares the amount of time it takes to add 2^i unique items for all non-negative integer values of i to a list and the amount of time it takes to remove 2^i unique items from the front of the ArrayList for all non-negative integer values of i.

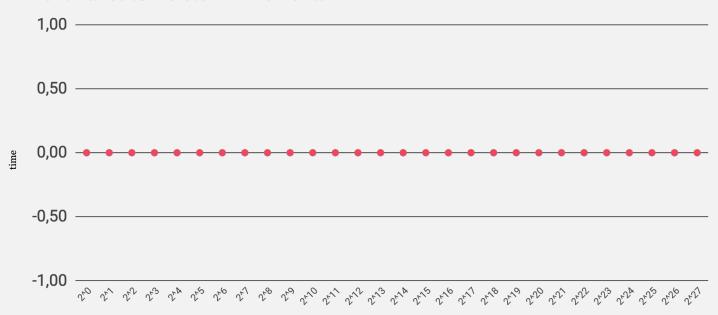
Both of these calculations were made until the until the computer ran out of memory or the time exceeded ten minutes.

Figure 1

Time It Takes to Add 2^i Elements



Time It Takes to Delete 2ⁱ Elements



number of elements

Figure 2



As more values were being added on figure 1, the more time it took.

Data could not be collected for figure 2 because the computer memory could not keep up.



