Working memory

RAM

(random access memory)

Long-term storage

Persistent storage

HDD hard drive

I byte=8bits

Mb=100000bits

MB=8000000bits

O(n)=n^2

SSD

ROM

(read only memory)

Search

Binary search

-linear search. Unsorted

Efficient: O(n) average n/2

Divided by 2 is not important

-binary search.

Efficient: O(log n)

2^n exponential

N^2 polynomial