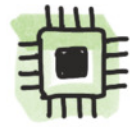


Data Structures

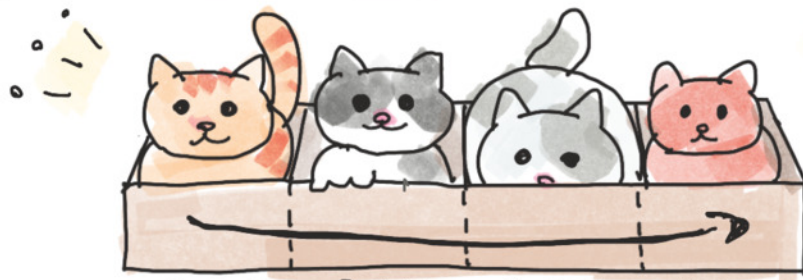
Array & Linked List

Array a linear data structure, stored in contiguous memory locations.

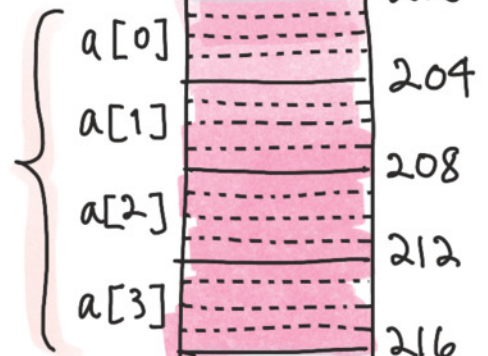


memory

Address 200 204 208 212



Array [0] [1] [2] [3]



- ♥ Assume each is an integer = requires 4 bytes space
- ♥ The array of must be allocated contiguously! → address 200 — 216



yay!

- ♥ can randomly access w/ index
a[2] →
- ♥ contiguous = no extra memory allocated = no memory overflow

meh!

- ☠ fixed size. Large space may not be avail for big array
∴ took the space! ∴
- ☠ Insert & delete elements are costly.
→ may need to create a new copy of the array & allocate at a new address.