

▷ Differences between ArrayList and LinkedList

- Linked List: not contiguous memory
 - ↳ note that ArrayList does have contiguous memory
- Linked List takes more memory than ArrayList

▷ Why use Linked List??

↳ More efficient way to add/remove elements!!

- Any insertion takes 5 steps
 - ↳ all you have to do is update the pointers!
 - And create a new node
- Any deletion takes ≈ 4 steps
 - ↳ just update the pointers to omit / no longer point to the Node you are deleting!

▷ Scenarios with Addition + Deletion

- Addition:

- addition to empty list
- addition to the front
- addition to the rear
- addition in the middle

- Removal:

- removal from a 1-element list
- removal from an empty list
- removal of head
- removal of tail
- removal in the middle