

ECE 220 Computer Systems & Programming

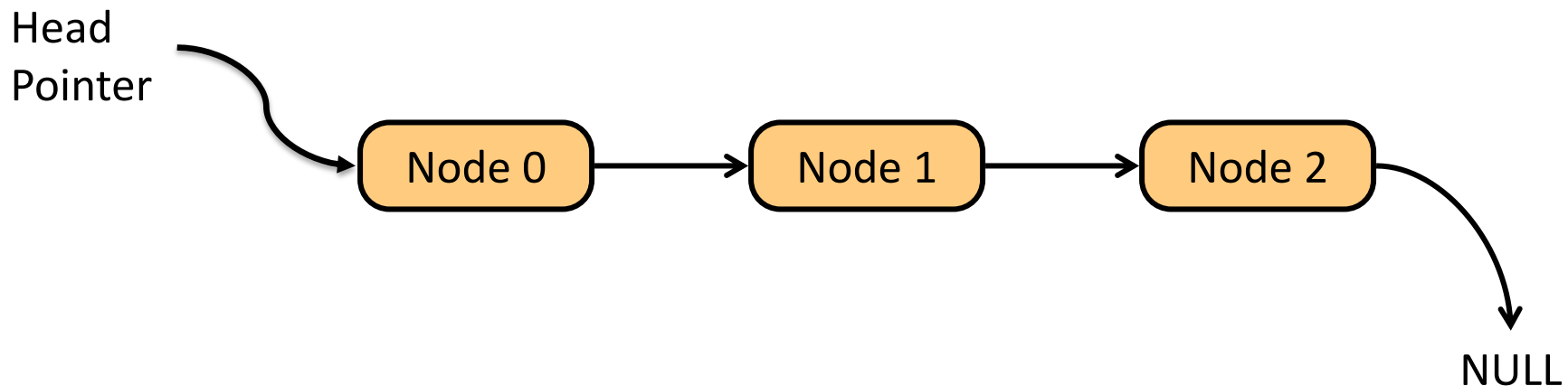
Linked List



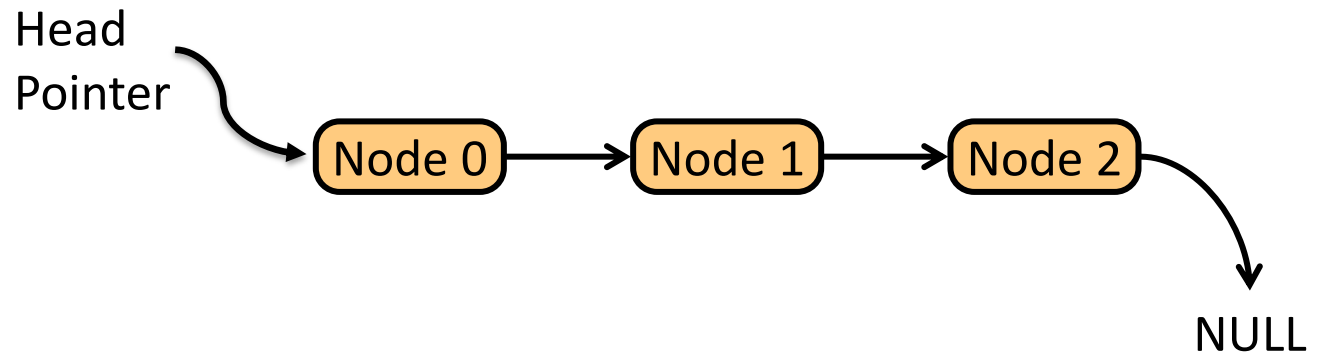
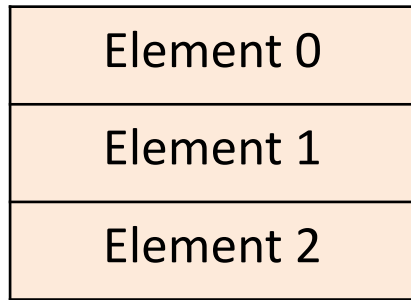
The Linked List Data Structure

A **linked list** is an ordered collection of **nodes**, each of which contains some data, connected using **pointers**.

- Each node points to the next node in the list.
- The first node in the list is called the _____
- The last node in the list is called the _____



Array vs. Linked List



	Array	Linked List
Memory Allocation	Static/Dynamic	Dynamic
Memory Structure	Contiguous	Not necessary consecutive
Order of Access	Random	Sequential
Insertion/Deletion	Create/delete space, then shift all successive elements	Change pointer address