EECS 204002
Data Structures 資料結構
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NTHU

CH. 4 LINKED LISTS

Array Reviews

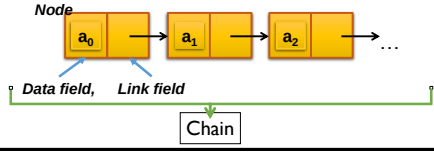
- Store an ordered list using **sequential** mapping
  - Element(node) a_i is stored in the location L_i of the array
  - Next node is at the location L_i+1
- Pros:
  - Suitable for **random access**
  - **Efficient** to insert/delete from the **end**
  - Adequate for special data structures, **Stack** and **Queue**.
- Cons:
  - **Difficult** to insert/delete nodes at **arbitrary** location

4.1 Singly Linked Lists and Chains

4.1

Linked Representation

- Nodes are **no longer placed continuously** in the memory space
- Each node stores the **address or location** of the next one
- Singly Linked List (SLL)
  - each node has exactly one pointer field



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