Linked List – Double Linked List

Team Emertxe

Double Linked List -Introduction

Introduction

What ?

Definition

It is a Linear data structure that consist of sequence of nodes which are connected to each other to form a list. Node consist of 3 field.

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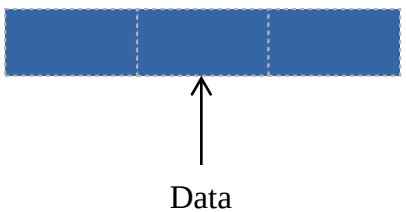

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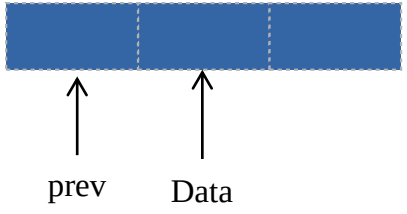

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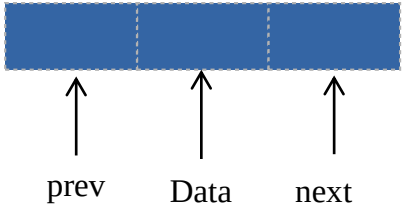

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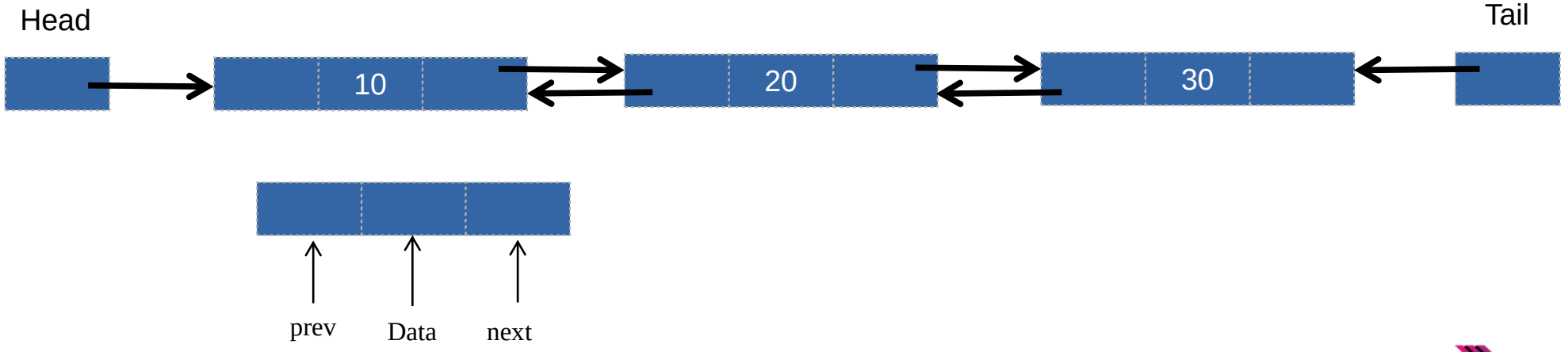

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Comparision

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Single Linked List

Double Linked List

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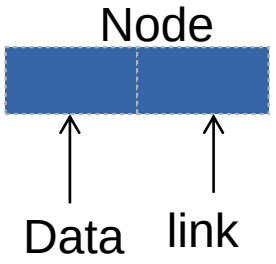
Comparision

Single Linked List

1.Each node consist of 2 parts



Double Linked List

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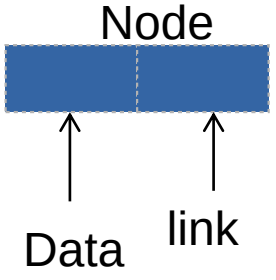

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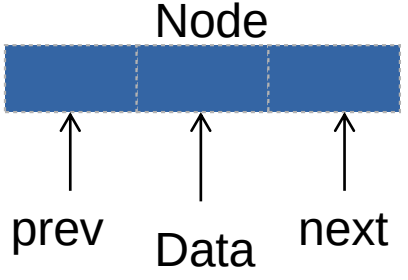

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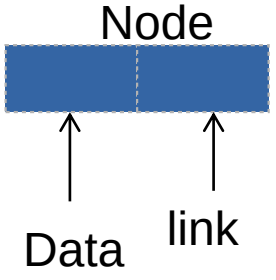

2.Traverse through list in one direction

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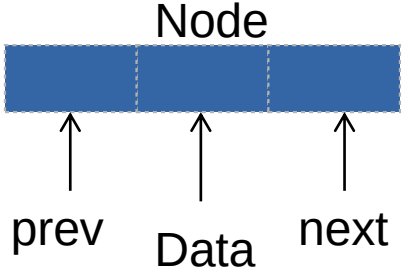

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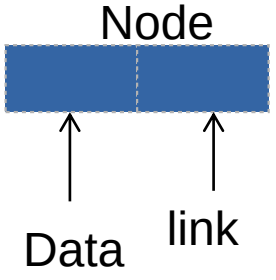

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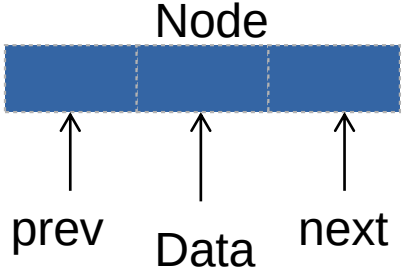


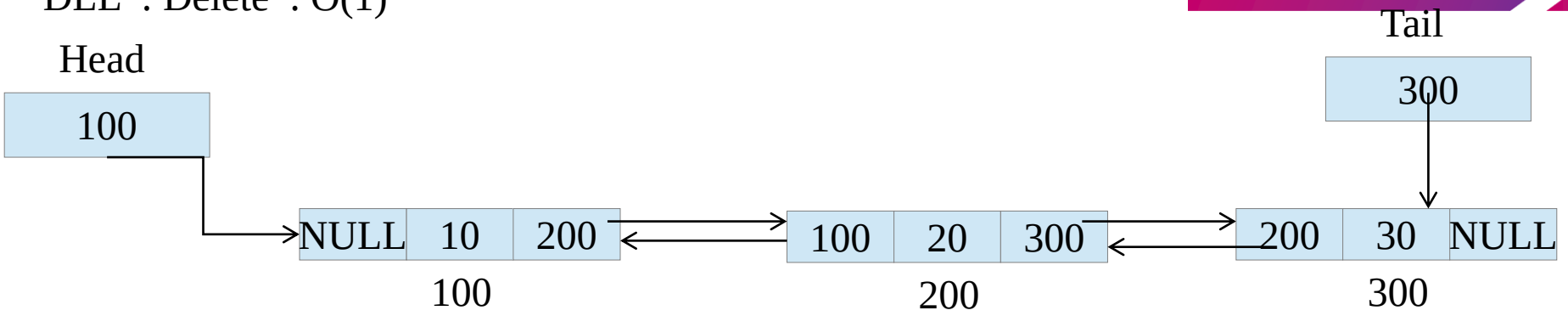
2. Traverse in forward /backward direction of linked list

Introduction

- **Insertion**
- At last
- At First
- After a given element
- Before a given Element
- **Print List**
- **Deletion**
- At Last
- At first
- List

Double Linked List- insert_at_last

DLL : Delete : O(1)



SLL : Delete : O(n)