Doubly_linked_list
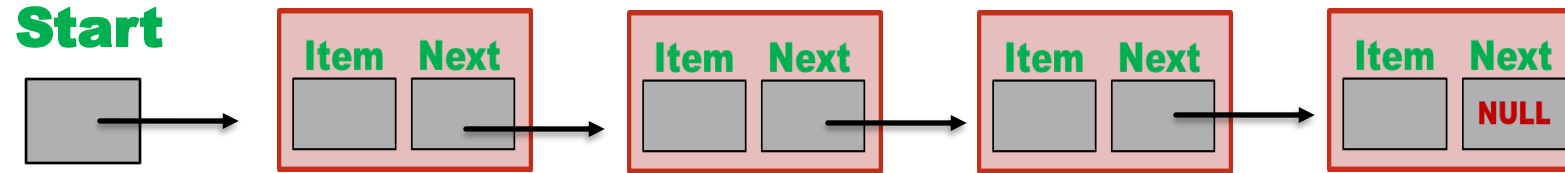

Mohammad Tasin (Tasin Coder)

Agenda
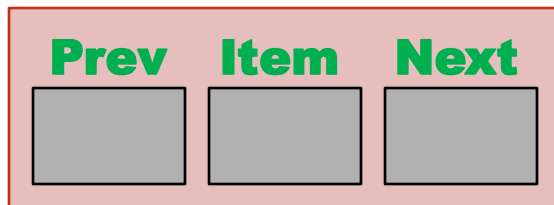
- Shortcomings of singly linked list
- Doubly linked list
- Node
- Insertion
- Deletion

Shortcomings of singly linked list

कमी

Start

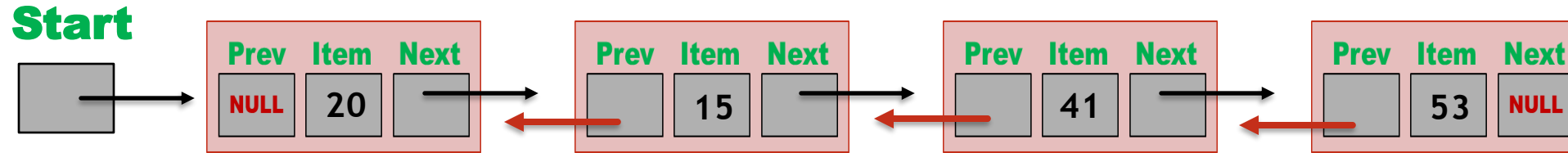| Item	Next		Item	Next		Item	Next		Item	Next
										NULL

▪ **In SLL , you can move only in the forward direction**

Prev	Item	Next

Doubly linked list

- Doubly linked list is a liner data structure.

Start

Prev	Item	Next
NULL	20	

Prev	Item	Next
	15	

Prev	Item	Next
	41	

Prev	Item	Next
	53	NULL

- In DLL , you can move in the forward direction and backword direction.

Node

Start

Prev | Item | Next
NULL | |

Prev | Item | Next
 | |

Prev | Item | Next
 | |

Prev | Item | Next
 | | NULL
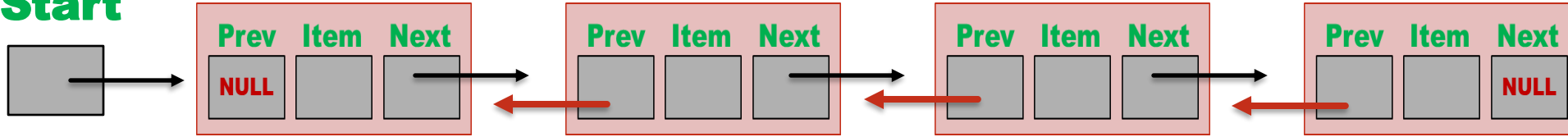
struct Node
{
    Node* Prev;

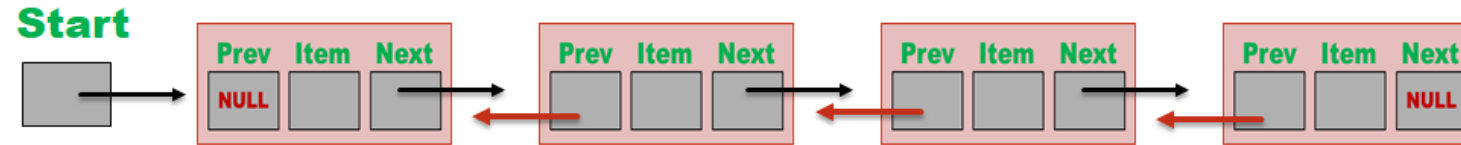   int Item;

    Node* Next;
};

Prev | Item | Next
 | |
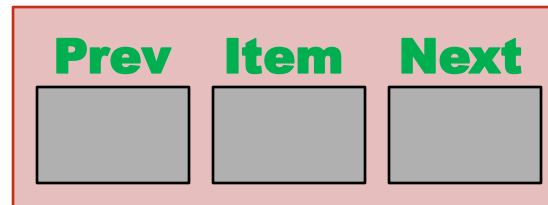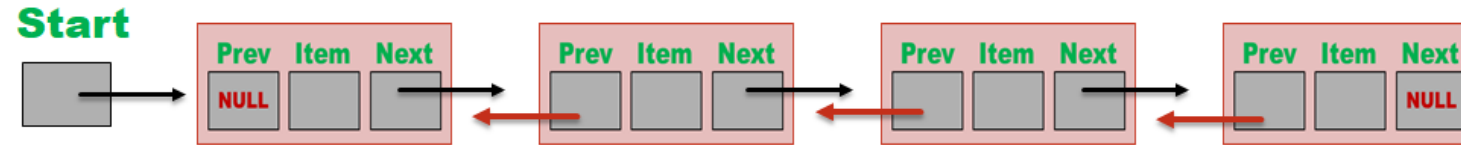
Insertion

Insertion

- **At first**

- **At Last**

- **After a node**

Deletion

- Delete first mode

- Delete Last Node

- Delete specific node