# Linked List

→ Elements are stored in different blocks of memory pointing to next block.

⇒

Head

Tail

```
┌───┬───┐      ┌───┬───┐    ┌───┬───┐
│ A │   │ ───→ │ B │   │ ─→ │ C │   │ ──→ NULL
└───┴───┘      └───┴───┘    └───┴───┘
  data   next
```
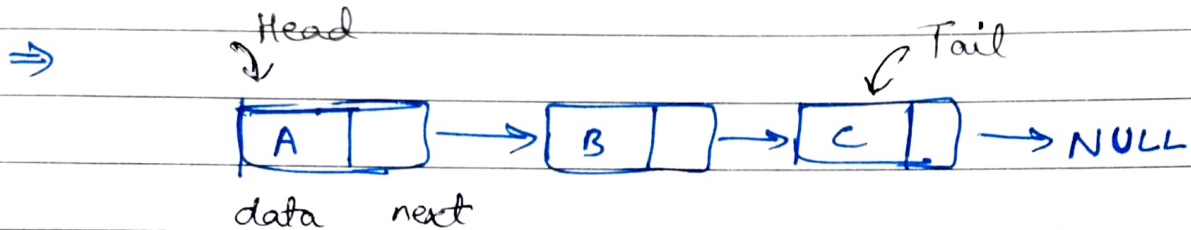
Syntax:

```
class LL{

    Node head;
    Node tail;

    Class Node {
        int data;
        Node next;
        Node (int d) {
            data = d;
        }
    }

}
```

# Doubly Linked List

→ It has extra pointer, alongwith 'next' pointer & 'data'.

⇒

```
NULL ←  ┌───┬───┐  ┌───┬───┐  ┌───┬───┐  ┌───┬───┐
        │ A │   │⇄ │ B │   │⇄ │ C │   │⇄ │ D │   │→ NULL
        └───┴───┘  └───┴───┘  └───┴───┘  └───┴───┘
          ↑Head
```
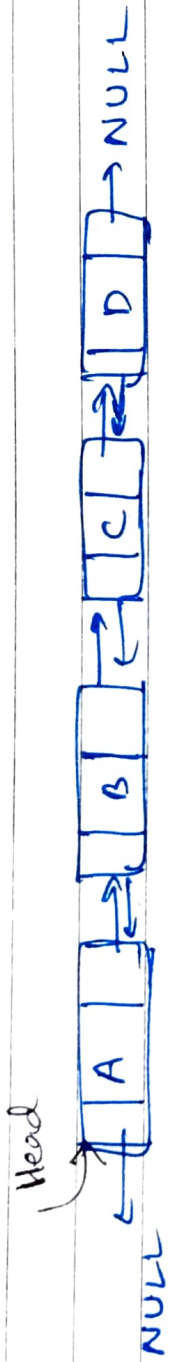
Syntax:
```
Class DLL {
    Node head;
    Class Node
    {
        int data;

        Node prev;
        Node next;

        Node (int d)
        {
            data = d;
        }
    }
}
```

# Circular Linked List

→ Here all nodes are connected to form circle. There is no NULL.

⇒ Head