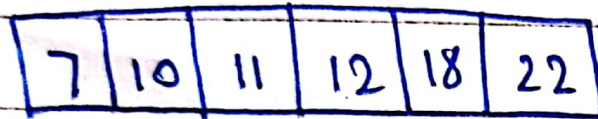


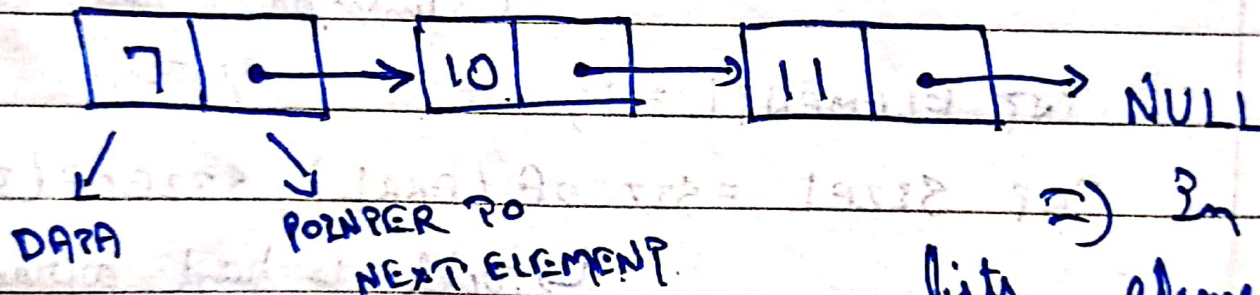
INTRODUCTION TO LINKED LIST

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→ Linked lists are similar to arrays (Linear data structures)



⇒ In Arrays elements are stored in contiguous memory locations.



⇒ In linked lists, elements are stored in non-contiguous memory locations.

→ Why Linked lists?

→ Memory and the capacity of an array remains fixed. In case of linked lists, we can keep adding and removing elements without any capacity constraints.

→ Drawbacks of Linked lists:

→ Extra memory space for pointers is required (for every node 1 pointer is needed).

→ Random access not allowed as elements are not stored in contiguous memory locations.

→ Implementation:

→ Linked list can be implemented using a structure in C language.

```
STRUCT NODE {
```

```
    INT DATA;
```

```
    STRUCT NODE *NEXT;
```

```
};
```

=> Self referencing structure.