**A List is a bi-directional linear storage of elements. Few key features as to why a list should be used is,**

1. It gives faster insertion and deletion operations.
2. Its access to random elements is slow.

**What makes a list different from an array?**

An array stores the elements in a contiguous manner in which inserting some element calls for a shift of other elements, which is time taking. But in a list, we can simply change the address the pointer is pointing to. I’ll show you how these work via an illustration.

Inserting an element caused other three element to shift , hence increasing the time complexity

Deleting an element caused other two element to shift, hence increasing the time complexity

2 8 3 4

2 5 8 3 4

INSERTING AND DELETING IN AN ARRAY

2 3 4

3

7

3

1

7

7

1

3

1

Deleting an element just caused a pointer to point to the next element

Inserting an element just caused a pointer to point to the new element

INSERTION AND DELETION IN A LIST

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