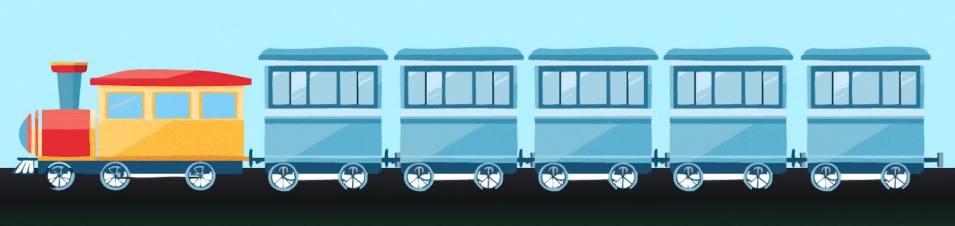
# Array

* **FIXED** block of Contiguous memory – stack memory
* Finding unknown element – O(n)
* Access element at index – O 1
* Add a value – O n
  + Because the array needs to be copied to new fixed block of memory
* Remove
  + O n – as the remaining items need to jump back one index
  + O 1 – in case if we are deleting last index element and there will be nothing to jump back

# Linked List

* **Dynamic** list where each node contains the value and pointer to next node
* like a train – each compartment has goods and connection to next compartment
* Finding unknow element – O n
* Access element - O n
  + As we need traverse each of the node
  + No concept of index
* Add value
  + O 1 – if we know after which node to insert - simply insert a new node and provide pointer in the last node
  + O n – if we don’t know where to insert then find the node and insert a new node next to it
* Remove node
  + O 1 – if we know where to remove
  + O n – find where to remove the node