

What is a user-defined constructor and its role in initialization?

A constructor you create to **initialize object fields** with custom values when the object is created.

✅ **Role:** Sets values directly during object creation.

Array vs Linked List (brief):

Feature	Array	Linked List
Size	Fixed	Dynamic
Access	Fast ($O(1)$)	Slow ($O(n)$)
Insertion	Slow (shift needed)	Fast (update pointers)
Memory	Less (no pointers)	More (extra pointers)