

What are the similarities between `ArrayList` and `LinkedList`?

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1. Insertion Order: The `List<E>` interface's `add(E e)` method defines a contract that specified elements must be appended to the list. As `ArrayList` and `LinkedList` are concrete implementations of `List` interface they follow the contract and hence insertion order of an element is preserved.
2. `clone()` operations of `ArrayList<E>` as well as `LinkedList<E>` returns the shallow copy of elements. This means elements are not itself copied or backup.
3. Synchronization: `ArrayList<E>` and `LinkedList<E>` both of them are non-synchronized collection. They can be synchronized by using `Collections.synchronizedList()` method of `Collections` class. All methods are synchronized except `iterator()`, `listIterator()` and `listIterator(int index)`.
4. Iterator: The iterators used in `ArrayList<E>` and `LinkedList<E>` are fail fast. Fail fast iterators throws `ConcurrentModificationException`.
5. Implementation: Both `ArrayList<E>` and `LinkedList<E>` are implementations of `List<E>` interface. `ArrayList` class provides Random Access to elements where `LinkedList` provides sequential access.