

Collections

- Group of variable number of Objects(zero too) of similar types
- Stored objects are called items or elements
- Type - read only or mutable
- List, Set and Map are three collection interfaces
- List is read only, ordered and can have duplicate, access using index
- MutableList - R/W, ordered, can have duplicate, access using index, ArrayList default
- List- Equal if same size and same structural item at same position
- Set- Read only, usually unordered, unique including null
- Mutable set - R/W, Default LinkedHashSet ordered, HashSet unordered

Collections

- `Map<K,V>` - read only , do not implement `Collection` interface, Key value pair
- Equal if same pair
- `MutableHashMap<K,V>` - R/W, Default `LinkedHashMap` ordered, `HashMap` unordered
- Null keys are allowed, if same key will replace
- Keys, values , entries and `forEach` to accessing elements
- Iterator - are used to iterate over `Collection` (`List` and `Set`), has `hasNext()` and `Next()` methods
- `ListIterator` - for list to iterate in both directions
- `MutableIterator` - for updating collection while iterating

Collections - Construction

- `listOf()`, `mutableListOf()` and so on methods
- `emptyList()` and so on for creating read only empty collections
- Concrete type using constructor i.e `ArrayList<String>()`
- Copy using `toList()`, `toMutableList()` ..., creates new Collection

Collections

