

## Advanced Java - 1

### Collections Framework

A Collection represents a group of object. Java Collections provide Classes and Interfaces for us to be able to write code quickly and efficiently.

### Why do we need Collections

We need Collections for efficient storage and better manipulation of data in Java.

For ex: we use arrays to store integers but what if we want to

- Resize this array?
- Insert an element in between?
- Delete an element in Array?
- Apply certain operations to change this array?

### How are collections available

Collections in Java are available as Classes and Interfaces. Following are few commonly used Collections in Java:

- \* ArrayList → For variable size Collection
- \* Set → For distinct collection
- \* Stack → A LIFO data structure
- \* HashMap → For storing key-value pairs

Collection class is available in java.util package. Collection class also provides static methods for sorting, searching etc.