Collection :

- Java madhe data store ani manage karayla ready-made structure.
- Collection he multiple object vr kam karnyasathi vapartat
- Collection Primitive data type la support nahi karat mhnun tyala wrap kel ahe.so wrapper class use krtat

I)List:

- Ordered Collection-elements sequence/position ne store hotat.
- Index based access-element pahije asel tr tyacha index dila ki direct gheu shkto
- Duplicate allowed
- Implementation-ArrayList,LinkedList,Vector

I)ArrayList:

- ArrayList mhanje dynamic array.
- Suruvatila lahan size cha array banto ani space kami padli ki swata motha hoto.
- Index based accessing
- Yat duplicates ani null donhi thevta yetat.
- Jar fast search ani fast reading pahije asel tar ArrayList best.
- ArrayList<String> list = new ArrayList<>();

II)Linked List:

- Element stored in nodes.
- Previous element address→Actual value→next element address
- Yat pan duplicates ani null thevta yetat.
- Jar kaam jast insert/delete var depend asel tar LinkedList best.

III)Vector:

- Same like Array List but thread-safe aahe.
- Thread-safe mhanje ekach veles ekach thread tyavar kaam karu shakte, mule safe pan slow aahe.

- Vector pan dynamic array sarkhach vadhat jato.
- Aajkal Vector kami vaparla jato karan to thoda old (legacy) class aahe.
- Multithreading madhe use karayla best

II)Set:

- Duplicate NOT allowed(Unique element collection).
- Order maintain nahi hot HashSet madhe / Sorted hava asel tr TreeSet use krto
- Fast searching sathi useful
- Examples: HashSet, LinkedHashSet, TreeSet

I)Hashset:

- Index Accessing not allowed
- Insertion order maintain nahi karat
- Fast aahe search, add, delete sathi (hashing mule).
- jar order cha farak padat nasel ani duplicates nako astil tar HashSet best.

II)LinkedHashset:

- LinkedHashSet insertion order maintain karto.
- But accessing order nahi maintain karat.
- Duplicate allowed nahi.
- jar order pan pahije + duplicates nako.

III)Treeset:

- Accessing order maintain karat.
- Duplicate allowed nahi.
- Null allowed nahi.
- Binary tree vaparto tyamule thoda slow.
- jar sorted/ascending order pahije asel tar TreeSet best

III) Queue(Mostly not use)

- FIFO (First In First Out)
- Jo element pahil add hoto ,toch element pahila remove hoto.
- Insert element→magun(rear end).
- Remove element→pudhun(front end)
- Examples: PriorityQueue, LinkedList (as Queue), ArrayDeque
- Example:

Queue<String> q = new LinkedList<>();

q.add("Apple");

q.add("Banana");

❖ Map:
- Key–Value pair madhye data store
- Key unique(duplicate key not allowed),
- Value duplicate allowed
- Mostly fast access / search sathi use karto
- Ethe access krtana index nahi pathavt Key pathvto
- Examples: HashMap, LinkedHashMap, TreeMap

I)HashMap:

- Data Random random order madhe store hoto
- Duplicate key allowed nahi,pn value duplicate chalate
- NULL key ekda allow hotat,null values pn allow hotat.
- Jar element chi order important nasel tr Hashmap use kru shkto.

II)LinkedHashMap:

- Insertion order maintain krto
- Jar order pahije pn duplicate key nko tr use karay best ahe.

III)TreeMap:

- Accessing order madhe values arrange karat.
- Jar sorted map pahije asel tr TreeMap use karto