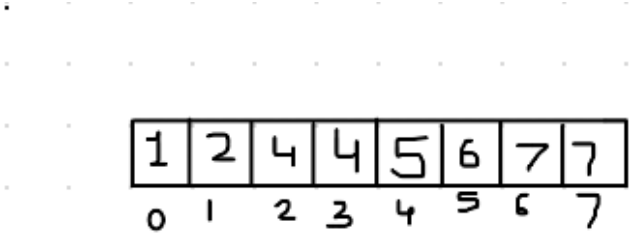
Upper Bound and Lower Bound:

- **Lower bound** gives you the first instance of the target in a sorted array which is greater than and equal to the target.
  i.e. >=

- **Upper Bound** gives you the instance of target which is only greater than target element.
  i.e >

Example:



1. In the above diagram, if we try to find out **LB for 5** then it will be at **index 4,** which is equal(>=) to target.
   ,and **UB for 5** is at **index 5,** which is greater(>) than 5.
2. **LB for 7** is at index 6 (>=)
   UB for 7 is at not present in an array.

Note : Working of LB and UB is works same as that of the binary search.
For code see : LbAndUb.java