


Assume you have experience in solving leet code problems related to Set methods in java programming then provide all the methods from higher priority method first then lower priority method at last where its one sentence beside the name describe what is the use of the corresponding method.

Got it  — If we're focusing on **Java Set interface methods** (commonly used in LeetCode problems), I'll list them **from higher priority (most frequently used / critical for solving problems) to lower priority (rarely needed)**, with a **one-line explanation** beside each.

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## High Priority (Most Useful in LeetCode)

1. **add(E e)** → Inserts the specified element if it's not already present (ensures uniqueness).
  2. **contains(Object o)** → Checks if the set contains the specified element (used in searching).
  3. **remove(Object o)** → Removes the element if present.
  4. **isEmpty()** → Returns **true** if the set has no elements.
  5. **size()** → Returns the number of elements in the set.
  6. **clear()** → Removes all elements from the set.
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## Medium Priority (Useful for Iteration / Bulk Operations)

7. **iterator()** → Returns an iterator to traverse elements in the set.

8. `addAll(Collection<? extends E> c)` → Adds all elements from the given collection, ignoring duplicates.
  9. `containsAll(Collection<?> c)` → Checks if the set contains all elements of the given collection.
  10. `removeAll(Collection<?> c)` → Removes all elements that are also in the given collection.
  11. `retainAll(Collection<?> c)` → Keeps only elements that are also in the given collection (set intersection).
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## Lower Priority (Less Frequently Needed)

12. `toArray()` → Converts the set into an array of `Object`.
  13. `toArray(T[] a)` → Converts the set into a typed array.
  14. `splititerator()` → Creates a Spliterator for parallel iteration (used in streams).
  15. `equals(Object o)` → Compares if two sets are equal (contain the same elements).
  16. `hashCode()` → Returns hash code for the set (consistent with `equals`).
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👉 On LeetCode, **most problems only require:**

`add()`, `contains()`, `remove()`, `isEmpty()`, and `size()` (core set operations).

Would you like me to also give you **a mini Java notebook with code snippets for each method**, so you can practice them with integers, strings, and maybe custom objects?