Common LinkedHashSet Interview Problems

1. Remove Duplicates (Preserve Order)

```
Integer[] input = {3, 5, 2, 3, 7, 5, 2};
Set<Integer> set = new LinkedHashSet<>(Arrays.asList(input));
Integer[] result = set.toArray(new Integer[0]);
```

2. First Non-Repeating Character

```
String word = "aabbcddexx";
LinkedHashSet<Character> set = new LinkedHashSet<>();
int[] freq = new int[256];
for (char c : word.toCharArray()) {
    set.add(c);
    freq[c]++;
}
for (char c : set) {
    if (freq[c] == 1) return c;
}
```

3. Check for Duplicates in Array

```
Integer[] array = {1, 2, 3, 4, 2};
Set<Integer> set = new LinkedHashSet<>();
for (Integer num : array) {
    if (!set.add(num)) return true; // duplicate found
}
return false;
```

4. Print Elements in Insertion Order

```
String[] words = {"red", "green", "blue", "green", "yellow"};
Set<String> orderedSet = new LinkedHashSet<>(Arrays.asList(words));
orderedSet.forEach(System.out::println);
```