2-HOUR PRACTICAL TASK

Task 1.0: Remove duplicates from dataset using Set

Dataset Example (given string array or list):

```
["Aman","Neha","Aman","Rohit","Neha","Sahil","Aman"]
```

Task Requirements

1. Store the values in a List
2. Remove duplicates using HashSet
3. Display:
    - Original List
    - Set with unique values
4. Convert back to List (optional)

1.1 Extended Coding Task

Build a **Student Duplicate Removal Module**

- Create Student class with `id`, `name`, `course`
- Add duplicate entries manually into List
- Remove duplicates using Set
- Override `equals()` and `hashCode()`

1.2 HashSet – Store Unique IP Addresses

Task

Simulate login attempts by storing **unique IP addresses** using **HashSet** and display how duplicates are removed.

Requirements

- Add at least 10 IP addresses including duplicates
- Show output before and after using HashSet

1.3 TreeSet – Sorted Product Prices

Task

Store product prices in a **TreeSet** and display them automatically sorted.

1.4 LinkedHashSet

Task:
Take 5 city names from the user (some may repeat).
Store them in a **LinkedHashSet** and print them in the same order entered, without duplicates.