**GUVI – HCLTech : Assignment – 2**

**1. E-commerce Cart System**: we will use Array List because it's like a list that remembers the order you put things in and lets you have more than one of the same item.

**2. Auto-Complete Feature**: we will use Tree Set because it's like a special list that automatically keeps all the words in alphabetical order.

**3. LRU Cache**: we will use LinkedHashMap because it remembers the last time you used something, so it's easy to find what you haven't used recently.

**4. Leaderboard System**: we will use Tree Set with a special rule to keep the highest scores at the top automatically.

**5. Real-Time Notification System**: we will use Linked List or ArrayDeque because they work like a line – the first notification in is the first one out.

**6. Eliminating Duplicate Emails**: we will use LinkedHashSet because it remembers the order you first saw each email and doesn't allow repeats.

**7. Directory Structure Simulation**: we will use Tree structure because it's like folders inside folders, which is how computer directories work.

**8. Priority-based Task Scheduling**: we will use Priority Queue because it automatically keeps the most important tasks at the front so you can get to them first.