**Assignment Title:**

**"Event Attendee Management System using Set in Java"**

**Problem Statement:**

You have been hired to develop a **simple Event Management System** that tracks **unique attendees** using their **ticket numbers** (as integers). Your application should prevent duplicate entries, allow real-time updates to the attendee list, and support full set-based operations using a **menu-driven interface** with Scanner.

**Functional Requirements (Menu Options):**

Design and implement a Java program that provides the following options:

1. **Add Attendee**
   * Accept a ticket number and add it to the list of attendees.
   * Ensure duplicates are not allowed (Set behavior).
2. **Remove Attendee**
   * Remove a ticket number from the attendee list.
3. **Check if Attendee Exists**
   * Search the attendee list to verify whether a ticket number is registered.
4. **Show All Attendees**
   * Display all unique attendees (using iterator or enhanced for loop).
5. **Get Total Attendees**
   * Show the total count of current attendees.
6. **Check if Attendee List is Empty**
   * Display a message indicating whether the list is currently empty.
7. **Clear All Attendees**
   * Remove all ticket numbers (reset the list).
8. **Merge Another Event Attendees**
   * Accept another list of ticket numbers and merge them into the existing set (union of sets).
9. **Retain Common Attendees with Another Event**
   * Accept another list and **retain only the ticket numbers** common to both sets (intersection).
10. **Remove Attendees Present in Another Event**

* Accept a new list and **remove all matching ticket numbers** from the current list (difference of sets).

1. **Convert Attendees to Array**

* Convert the current attendee list into an array and print the result.

1. **Exit the Application**