

Problem Statement

You are building a **Student Attendance Tracker** for a school using `HashMap<String, Integer>`. The system should track how many classes each student attended and allow the user to perform various operations.

Functionalities to Implement

1. **Insert Students with Initial Attendance Count**
 - Read n student names and attendance counts.
 - If a student already exists, skip and print:
 - Duplicate student skipped: <name>
 - If attendance count is negative, throw `InvalidAttendanceCountException` with message:
 - Attendance count cannot be negative for student <name>
1. **Display All Student Attendance Records**
2. If no records, print: No students available.
3. **Update Attendance for a Student**
4. Increment by 1 if found, otherwise print: Student not found.
5. **Show Students with Attendance Above a Threshold**
6. **Show Students Whose Names Start with a Given Letter** (case-insensitive)

Class & Method Requirements

Class Name: `AttendanceManager`

Custom Exception: `InvalidAttendanceCountException`

Method Signatures:

- `public static void insertStudents(HashMap<String, Integer> students, int n) throws InvalidAttendanceCountException`
- `public static void displayStudents(HashMap<String, Integer> students)`
- `public static void updateAttendance(HashMap<String, Integer> students, String name)`
- `public static void showStudentsAboveThreshold(HashMap<String, Integer> students, int threshold)`
- `public static void showStudentsStartingWith(HashMap<String, Integer> students, char letter)`

Sample Input:

Enter number of students: 3

Enter student 1 name: Alice

Enter attendance count: 5

Enter student 2 name: Bob

Enter attendance count: 8

Enter student 3 name: Alice

Enter attendance count: 6

Enter student name to update: Alice

Enter attendance threshold: 6

Enter letter to search: B

Expected Output:

Duplicate student skipped: Alice

Students and Attendance Counts:

Alice: 6

Bob: 8

Attendance updated for Alice

Students with attendance above 6:

Bob: 8

Students starting with 'B':

Bob: 8