Sheet 7

Q1) Create a class Time representing time in **hours, minutes, and seconds**. Implement the following requirements:

- Include a constructor to initialize the time.
- Overload the + operator to add two Time objects and ensure the result is correctly normalized (adjust for overflow in seconds and minutes).
- Overload the == operator to compare two Time objects.

Q2) Create a class **TemperatureLog** that stores daily temperature readings for a week (7 days) in an array. The class should:

1. Provide a member function **calculateAverageTemperature()** to compute the average temperature for the week.
2. Provide a member function **displayTemperatures()** to print all temperature readings.
3. Include a function **findLowestTemperature()** that operates on the temperatures array and returns the lowest temperature of the week.

Q3) Create a class **Student** that stores the details of a student, including their name and marks in three subjects. The class should:

1. Have a constructor to initialize the name and marks **(subject1, subject2, subject3)** of a student.
2. Include a member function **calculateAverage()** to compute the average marks of a student.
3. In the main function, create an array of Student objects to store the details of multiple students.
4. Implement a function **findTopScorer()** that takes the array of Student objects and returns the student with the highest average marks.