**[Save Below code as BerkeleyClockSync.java]**

import java.util.ArrayList;

public class BerkeleyClockSync {

public static void main(String[] args) {

// Initialize the system clocks

int[] systemClocks = { 10, 12, 13, 11, 14 };

int masterClock = 0;

// Print the initial system clocks

System.out.print("System clocks: ");

for (int clock : systemClocks) {

System.out.print(clock + " ");

}

System.out.println();

// Calculate the average system clock

int sum = 0;

for (int clock : systemClocks) {

sum += clock;

}

int averageClock = sum / systemClocks.length;

// Calculate the time difference for each system clock

ArrayList<Integer> timeDifferences = new ArrayList<>();

for (int clock : systemClocks) {

timeDifferences.add(averageClock - clock);

}

// Calculate the time adjustment for the master clock

int timeAdjustment = 0;

for (int difference : timeDifferences) {

timeAdjustment += difference;

}

timeAdjustment /= timeDifferences.size();

// Update the master clock

masterClock = averageClock - timeAdjustment;

// Print the updated system clocks and master clock

System.out.print("Updated system clocks: ");

for (int clock : systemClocks) {

System.out.print((clock - timeAdjustment) + " ");

}

System.out.println();

System.out.println("Master clock: " + masterClock);

}

}