OOPJ TEST (06/01/2026)

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1.   Write a Java program that satisfies all of the following conditions:
 a. Create a class Time with instance variables hours, minutes, and seconds.
 b. Use a parameterized constructor to initialize the variables and normalize the time so that:
   i. seconds < 60
  ii. minutes < 60
 c. Use the this keyword to distinguish between instance variables and constructor parameters.
 d. Create a method addSeconds(int s) that:
   i. Adds s seconds to the current time
  ii. Returns the current object to enable method chaining.
 e. In the main() method:
   i. Create one Time object
  ii. Call addSeconds() twice using method chain
 iii. Display the final normalized time in HH:MM:SS format

```java
class Time {
    int hours, minutes, seconds;
    Time(int hours, int minutes, int seconds) {
        if (seconds >= 60) {
            minutes = minutes + (seconds / 60);
            seconds = seconds % 60;
        }
        if (minutes >= 60) {
            hours = hours + (minutes / 60);
            minutes = minutes % 60;
        }
        this.hours = hours;
        this.minutes = minutes;
        this.seconds = seconds;
    }
    Time addSeconds(int s) {
        seconds = seconds + s;
        return new Time(hours, minutes, seconds);
    }
    public static void main(String[] args) {
        System.out.println("Nishant Nahar - 241551078");
        Time t = new Time(1, 89, 50);
        t = t.addSeconds(15);
        t = t.addSeconds(90);
```

```java
        System.out.println("Time " + t.hours + ":" + t.minutes + ":" + t.seconds);
    }
}
```

OUTPUT

```
B:\java_lab\test  main ? 1 -1  java .\test_2.java
Nishant Nahar - 241551078
Time 2:31:35
B:\java_lab\test  main ? 1 -1
```