Hands-on No. : 9

Topic : Date and Time API -1

Date : 13-08-25

Solve the following problems

Question No.	Question Detail
1	a) **Check Leap Year**: Write a program to check if a given year is a leap year using LocalDate. b) **Day of Week Finder**: Find out the day of the week for a given date (e.g., your birthday). c) **Date Comparison**: Check if a given date is in the past or future compared to today. d) **Add/Subtract Days**: Add 30 days to the current date and display the result. e) **Find Next Tuesday**: Find the date of the next Tuesday from today using TemporalAdjusters.
2	a) **Current Time Display**: Display the current time in HH:mm:ss format. b) **Time Difference**: Calculate the number of minutes between now and a given time (e.g., lunch at 13:00). c) **Add Time**: Add 1 hour and 15 minutes to the current time. d) **Compare Times**: Check if a given time is before or after the current time.
3	a) **Combine Date and Time**: Create a LocalDateTime object using LocalDate and LocalTime. b) **Calculate Duration**: Calculate how many hours are between two LocalDateTime objects (e.g., from course start to end). c) **Schedule a Meeting**: Given a start date and time, find the date and time after 3 days and 5 hours.
4	a) **Time in Another Zone**: Display the current date and time in Asia/Tokyo and America/New_York using ZonedDateTime. b) **Convert to UTC**: Convert the current local date-time to UTC using ZoneId.of("UTC").

It is going to be hard but, hard does not mean impossible.

5	**Format and Parse Dates**: Format the current date in dd-MM-yyyy format and then parse it back to a LocalDate object using DateTimeFormatter