ASSIGNMENT – 5

JAVA PROGRAMMING LABORATORY(XC-3461)

NAME : **ADITHYA T.**

ROLL NO : **2024239001.**

PROGRAMME : **M.Sc COMPUTER SCIENCE (5YRS INTEGRATED)**

TOPIC : **DATE AND TIME.**

COURSE : **JAVA PROGRAMMING LABORATORY.**

COURSE CODE : **XC-3461.**

1. Java Program to Format Time in AM-PM format

CODE:

```java
import java.time.LocalTime;
import java.time.format.DateTimeFormatter;

public class ampm{
    public static void main(String[] args)
   {
        LocalTime time = LocalTime.now();

DateTimeFormatter formatter = DateTimeFormatter.ofPattern("hh:mm a");

System.out.println("Time in AM-PM format: " + time.format(formatter));
    }
}
```

2. Java Program to Display Name of a Month in (MMM) Format

CODE:

```java
import java.time.LocalDate;
import java.time.format.DateTimeFormatter;

public class monthMMM {
    public static void main(String[] args)
{
        LocalDate date = LocalDate.now();
DateTimeFormatter formatter = DateTimeFormatter.ofPattern("MMM");
        System.out.println("Month (MMM): " + date.format(formatter));
    }
}
```

3. Java Program to Display Current Hour and Current Minute

CODE:

```java
import java.time.LocalTime;

public class current_hr_min{
    public static void main(String[] args) {

        LocalTime time = LocalTime.now();
        System.out.println("Hour: " + time.getHour());
        System.out.println("Minute: " + time.getMinute());

    }
}
```

4. Java Program to Display Current Date and Time

CODE:

```java
import java.time.LocalDateTime;

public class current_date_time {
    public static void main(String[] args) {

        LocalDateTime now = LocalDateTime.now();
        System.out.println("Current Date and Time: " + now);

    }
}
```

5. Program to convert time from 12 hour to 24-hour format

CODE:

```java
import java.time.LocalTime;
import java.time.format.DateTimeFormatter;

public class convert12to24 {
    public static void main(String[] args) {
        String time12 = "07:30 PM";
DateTimeFormatter format12 = DateTimeFormatter.ofPattern("hh:mm a");
```

```
DateTimeFormatter format24 = DateTimeFormatter.ofPattern("HH:mm");

        LocalTime time = LocalTime.parse(time12, format12);
        System.out.println("24-Hour Format: " + time.format(format24));

    }
}
```

6. Java Program Format Time in MMMM Format

CODE:

```
import java.time.LocalDate;
import java.time.format.DateTimeFormatter;

public class monthMMMM {
    public static void main(String[] args) {
        LocalDate date = LocalDate.now();
        DateTimeFormatter formatter =
DateTimeFormatter.ofPattern("MMMM");
System.out.println("Month (MMMM): " + date.format(formatter));
    }
}
```

7. How to format seconds?

CODE:
```
import java.time.LocalTime;
import java.time.format.DateTimeFormatter;

public class formatSec {
    public static void main(String[] args) {
        LocalTime time = LocalTime.now();
                                       DateTimeFormatter    formatter    =
DateTimeFormatter.ofPattern("HH:mm:ss");
        System.out.println("Time with Seconds: " + time.format(formatter));
    }
}
```

8. Java Program to Display Name of a Month in (MMM) Format

Code:

```java
import java.time.LocalDate;
import java.time.format.DateTimeFormatter;

public class monthMMM {
    public static void main(String[] args)
    {
        LocalDate date = LocalDate.now();
DateTimeFormatter formatter = DateTimeFormatter.ofPattern("MMM");
        System.out.println("Month (MMM): " + date.format(formatter));
    }
}
```

9. Java Program to Display Name of the Weekdays in Calendar Year

code:

```java
import java.time.DayOfWeek;

public class week_days {
    public static void main(String[] args) {
        for (DayOfWeek day : DayOfWeek.values()) {
            System.out.println(day);
        }
    }
}
```

10.How to add time to Date?

Code:

```java
import java.time.LocalDateTime;

public class addtime {
    public static void main(String[] args) {
        LocalDateTime now = LocalDateTime.now();
        LocalDateTime updated = now.plusHours(5).plusDays(2);

        System.out.println("Current: " + now);
        System.out.println("After Adding Time: " + updated);
    }
}
```

11.Java Program to Display Time in Different Country Format

code:

```java
import java.time.ZonedDateTime;
import java.time.ZoneId;
import java.time.format.DateTimeFormatter;

public class diff_ctry_time {
    public static void main(String[] args) {
        DateTimeFormatter formatter = DateTimeFormatter.ofPattern("dd-MM-yyyy HH:mm:ss");

        ZonedDateTime india =
ZonedDateTime.now(ZoneId.of("Asia/Kolkata"));
        ZonedDateTime usa =
ZonedDateTime.now(ZoneId.of("America/New_York"));

        System.out.println("India Time: " + india.format(formatter));
        System.out.println("USA Time: " + usa.format(formatter));
    }
}
```

12. How to display time in different languages?

Code:

```java
import java.time.LocalDate;
import java.time.format.DateTimeFormatter;
import java.util.Locale;

public class diff_lang {
    public static void main(String[] args) {
        LocalDate date = LocalDate.now();

        DateTimeFormatter french =
            DateTimeFormatter.ofPattern("dd MMMM yyyy",
Locale.FRENCH);

        DateTimeFormatter german =
```

```java
            DateTimeFormatter.ofPattern("dd MMMM yyyy",
Locale.GERMAN);

        System.out.println("French: " + date.format(french));
        System.out.println("German: " + date.format(german));
    }
}
```

13. Java Program to Show Time by Rolling Through Hours and Months

code:

```java
import java.time.LocalDateTime;

public class rollingtime{
    public static void main(String[] args) {
        LocalDateTime dateTime = LocalDateTime.now();

        for (int i = 1; i <= 5; i++) {
            dateTime = dateTime.plusHours(1).plusMonths(1);
            System.out.println("Updated: " + dateTime);
        }
    }
}
```

14.How to find which week of the year?

Code:

```java
import java.time.LocalDate;
import java.time.temporal.WeekFields;
import java.util.Locale;

public class weekofyear {
    public static void main(String[] args) {
        LocalDate date = LocalDate.now();
        int week =
date.get(WeekFields.of(Locale.getDefault()).weekOfYear());
        System.out.println("Week of the Year: " + week);
    }
```

```
}
```

15. Java Program to Display Dates of a Calendar Year in Different Format.

Code:

```java
import java.time.LocalDate;
import java.time.format.DateTimeFormatter;

public class calendar_year_format {
    public static void main(String[] args) {
        LocalDate date = LocalDate.of(2026, 1, 1);
        DateTimeFormatter formatter =
DateTimeFormatter.ofPattern("dd/MM/yyyy");

        while (date.getYear() == 2026) {
            System.out.println(date.format(formatter));
            date = date.plusDays(1);
        }
    }
}
```