Experiment No : 1

PRN : 22UAI021

Algorithm:

1. Create class Calendar.

2. Define the main method. 3. Store command line arguments in particular variables. (First is date, second is month and third is year).

4. By using switch case and different for loops display particular day for given date.

5. Save the program with the name of the class which consist of main() method.

6. Compile the program from command prompt by using javac command.

7. Execute program by passing command line arguments

8.difference between two date

Program :

```
import java.time.LocalDate;

import java.time.format.DateTimeFormatter;

import java.time.temporal.ChronoUnit;


public class Calendar1 {
    public static void main(String[] args) {
        if (args.length < 3) {
            System.out.println("Please provide date, month, and year as command line arguments.");
            return;
```

```java
        }

        int day = Integer.parseInt(args[0]);
        int month = Integer.parseInt(args[1]);
        int year = Integer.parseInt(args[2]);

        LocalDate date = LocalDate.of(year, month, day);
        String dayOfWeek = date.getDayOfWeek().toString();

        System.out.println("Date: " + date);
        System.out.println("Day of the week: " + dayOfWeek);

        // Display calendar for the given month
        displayCalendar(year, month);

        // Calculate difference between two dates if provided
        if (args.length == 6) {
            int day2 = Integer.parseInt(args[3]);
            int month2 = Integer.parseInt(args[4]);
            int year2 = Integer.parseInt(args[5]);

            LocalDate date2 = LocalDate.of(year2, month2, day2);
            long daysBetween = ChronoUnit.DAYS.between(date, date2);

            System.out.println("\nDifference between " + date + " and " + date2 + ": " + Math.abs(daysBetween) + " days");
        }
```

```java
    }

    private static void displayCalendar(int year, int month) {
        LocalDate date = LocalDate.of(year, month, 1);
        System.out.println("\nCalendar for " + date.getMonth() + " " + year);
        System.out.println("Su Mo Tu We Th Fr Sa");

        int dayOfWeek = date.getDayOfWeek().getValue() % 7;
        for (int i = 0; i < dayOfWeek; i++) {
            System.out.print("   ");
        }

        while (date.getMonthValue() == month) {
            System.out.printf("%2d ", date.getDayOfMonth());
            if (date.getDayOfWeek().getValue() % 7 == 6) {
                System.out.println();
            }
            date = date.plusDays(1);
        }
        System.out.println();
    }
}
```

OUTPUT :

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS D:\ankita> javac Calendar1.java
PS D:\ankita> java Calendar1 15 02 2005 18 09 2024
Date: 2005-02-15
Day of the week: TUESDAY

Calendar for FEBRUARY 2005
Su Mo Tu We Th Fr Sa
       1  2  3  4  5
 6  7  8  9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28

Difference between 2005-02-15 and 2024-09-18: 7155 days
```