

Day 26

Assignment 6: Java 8 Date and Time API Write a program that calculates the number of days between two dates input by the user in java code and explanation.

A)

Sure, here's a Java program that calculates the number of days between two dates input by the user:

Java code:

```
import java.time.LocalDate;
import java.time.temporal.ChronoUnit;
import java.util.Scanner;

public class DaysBetweenDates {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        // Prompt the user to input the first date
        System.out.print("Enter the first date (YYYY-MM-DD): ");
        String inputDate1 = scanner.nextLine();
        LocalDate date1 = LocalDate.parse(inputDate1);

        // Prompt the user to input the second date
        System.out.print("Enter the second date (YYYY-MM-DD): ");
        String inputDate2 = scanner.nextLine();
        LocalDate date2 = LocalDate.parse(inputDate2);

        // Calculate the number of days between the two dates
        long daysBetween = ChronoUnit.DAYS.between(date1, date2);

        // Display the result
        System.out.println("Number of days between " + date1 + " and " + date2 + " is: " +
            Math.abs(daysBetween));

        scanner.close();
    }
}
```

Explanation:

We import necessary classes from the java.time package for working with dates and times.

We create a Scanner object to take input from the user.

The user is prompted to input the first date and the second date in the format "YYYY-MM-DD".

We parse the user input strings into `LocalDate` objects using the `LocalDate.parse()` method.

We use the `ChronoUnit.DAYS.between()` method to calculate the number of days between the two dates.

Finally, we display the result to the user. The `Math.abs()` function is used to ensure that the result is positive regardless of the order of input dates.

The `Scanner` is closed to release system resources.