Write a Java program to create a class called "Employee" with a name, salary, and hire date attributes, and a method to calculate years of service.

Sample Solution:

Java Code:

```
// Employee.java
// Import the LocalDate class from the java.time package
import java.time.LocalDate;

// Import the Period class from the java.time package
import java.time.Period;

// Define the Employee class
public class Employee {

  // Declare a private variable to store the name of the employee
  private String name;

  // Declare a private variable to store the salary of the employee
  private double salary;

  // Declare a private variable to store the hire date of the employee
  private LocalDate hireDate;

  // Constructor for the Employee class
  public Employee(String name, double salary, LocalDate hireDate) {
    // Initialize the name of the employee
    this.name = name;

    // Initialize the salary of the employee
    this.salary = salary;

    // Initialize the hire date of the employee
    this.hireDate = hireDate;
  }

  // Method to get the name of the employee
  public String getName() {
    // Return the name of the employee
```

```
    return name;
  }

  // Method to set the name of the employee
  public void setName(String name) {
    // Update the name variable to the new value
    this.name = name;
  }

  // Method to get the salary of the employee
  public double getSalary() {
    // Return the salary of the employee
    return salary;
  }

  // Method to set the salary of the employee
  public void setSalary(double salary) {
    // Update the salary variable to the new value
    this.salary = salary;
  }

  // Method to get the hire date of the employee
  public LocalDate getHireDate() {
    // Return the hire date of the employee
    return hireDate;
  }

  // Method to set the hire date of the employee
  public void setHireDate(LocalDate hireDate) {
    // Update the hire date variable to the new value
    this.hireDate = hireDate;
  }

  // Method to calculate the years of service of the employee
  public int getYearsOfService() {
    // Calculate the period between the hire date and the current date, and
    return Period.between(hireDate, LocalDate.now()).getYears();
  }

  // Method to print the details of the employee
```

```
    public void printEmployeeDetails() {
      // Print the name of the employee
      System.out.println("\nName: " + name);

      // Print the salary of the employee
      System.out.println("Salary: " + salary);

      // Print the hire date of the employee
      System.out.println("Hire Date: " + hireDate);
    }
  }
```

In the above Employee class, there are three private attributes: name, salary, and hireDate, a constructor that initializes these attributes with the values passed as arguments, and getter and setter methods to access and modify these attributes.

There is a method “getYearsOfService()” to calculate years of service between the hire date and the current date, and returns the number of years as an integer value.

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```
// Main.java
// Import the LocalDate class from the java.time package
import java.time.LocalDate;

// Define the Main class
public class Main {

  // Main method, the entry point of the Java application
  public static void main(String[] args) {

    // Create a new Employee object named employee1 with name "Roberta Petr
    Employee employee1 = new Employee("Roberta Petrus", 50000, LocalDate.pa

    // Create a new Employee object named employee2 with name "Loyd Blair",
    Employee employee2 = new Employee("Loyd Blair", 70000, LocalDate.parse(

    // Create a new Employee object named employee3 with name "Magdalena Ar
    Employee employee3 = new Employee("Magdalena Artemon", 50000, LocalDate

    // Print the details of employee1
    employee1.printEmployeeDetails();
```

```
        // Print the years of service of employee1
        System.out.println("Years of Service: " + employee1.getYearsOfService()

        // Print the details of employee2
        employee2.printEmployeeDetails();

        // Print the years of service of employee2
        System.out.println("Years of Service: " + employee2.getYearsOfService()

        // Print the details of employee3
        employee3.printEmployeeDetails();

        // Print the years of service of employee3
        System.out.println("Years of Service: " + employee3.getYearsOfService()
    }
}
```

In the above main() function, we create three instances of the "Employee" class, and print their name, salary, hire date, and years of service using the appropriate methods.

Sample Output:

```
Name: Roberta Petrus
Salary: 50000.0
HireDate: 2021-04-01
Years of Service: 2

Name: Loyd Blair
Salary: 70000.0
HireDate: 2015-04-01
Years of Service: 8

Name: Magdalena Artemon
Salary: 50000.0
HireDate: 2011-01-15
Years of Service: 12
```

Flowchart: