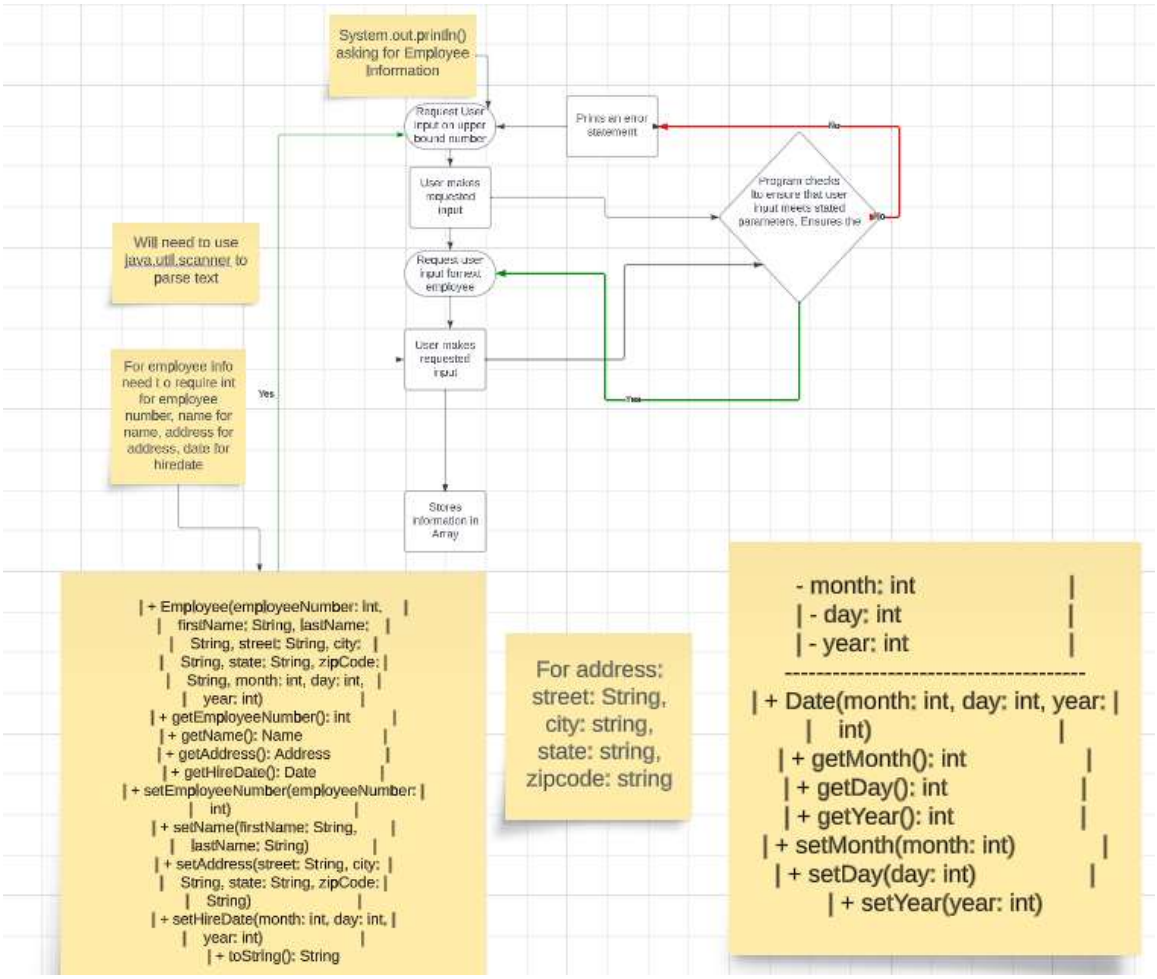
//Design



//Code

```
package EmployeeManagement;

import java.util.Scanner;


class Date {

    private int month;

    private int day;

    private int year;


    /**

     * Constructs a Date object with the specified month, day, and year.
```

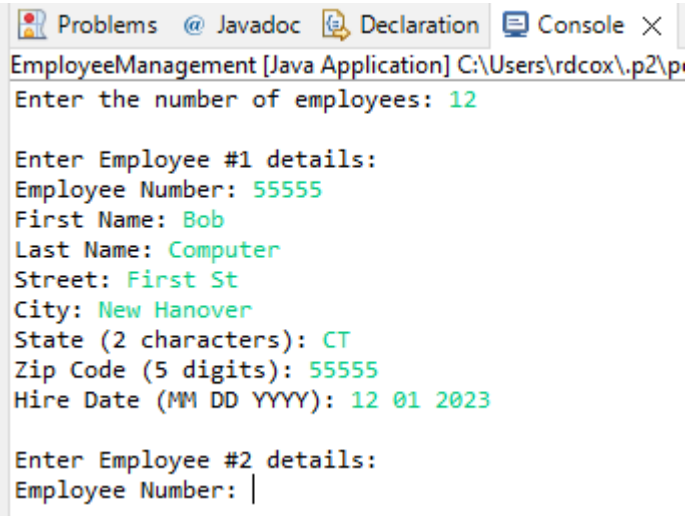
```
     *
     * @param month The month (1-12).
     * @param day   The day (1-31).
     * @param year  The year (greater than 1900 and less than 2020).
     */
    public Date(int month, int day, int year) {
        this.month = month;
        this.day = day;
        this.year = year;
    }

    @Override
    public String toString() {
        return month + "/" + day + "/" + year;
    }
}

class Name {
    private String firstName;
    private String lastName;

    /**
     * Constructs a Name object with the specified first name and last name.
     *
     * @param firstName The first name.
     * @param lastName  The last name.
     */
    public Name(String firstName, String lastName) {
```

```
        this.firstName = firstName;
        this.lastName = lastName;
    }

    @Override
    public String toString() {
        return firstName + " " + lastName;
    }
}

class Address {
    private String street;
    private String city;
    private String state;
    private String zipCode;

    /**
     * Constructs an Address object with the specified street, city, state, and zip code.
     *
     * @param street  The street address.
     * @param city    The city.
     * @param state   The state (2 characters).
     * @param zipCode The zip code (5 digits).
     */
    public Address(String street, String city, String state, String zipCode) {
        this.street = street;
        this.city = city;
```

```
        this.state = state;
        this.zipCode = zipCode;
    }

    @Override
    public String toString() {
        return street + ", " + city + ", " + state + " " + zipCode;
    }
}

class Employee {
    private int employeeNumber;
    private Name name;
    private Address address;
    private Date hireDate;

    /**
     * Constructs an Employee object with the specified employee number, name,
address, and hire date.
     *
     * @param employeeNumber The employee number.
     * @param name           The name (a Name object).
     * @param address        The address (an Address object).
     * @param hireDate       The hire date (a Date object).
     */
    public Employee(int employeeNumber, Name name, Address address, Date hireDate) {
        this.employeeNumber = employeeNumber;
        this.name = name;
```

```
        this.address = address;
        this.hireDate = hireDate;
    }

    @Override
    public String toString() {
        return "Employee Number: " + employeeNumber + "\nName: " + name + "\nAddress:
" + address + "\nHire Date: " + hireDate + "\n";
    }
}

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

        System.out.print("Enter the number of employees: ");
        int numEmployees = scanner.nextInt();
        scanner.nextLine(); // Consume the newline

        Employee[] employees = new Employee[numEmployees];

        for (int i = 0; i < numEmployees; i++) {
            System.out.println("\nEnter Employee #" + (i + 1) + " details:");

            System.out.print("Employee Number: ");
            int empNumber = scanner.nextInt();
            scanner.nextLine();
```

```
System.out.print("First Name: ");
String firstName = scanner.nextLine();

System.out.print("Last Name: ");
String lastName = scanner.nextLine();

System.out.print("Street: ");
String street = scanner.nextLine();

System.out.print("City: ");
String city = scanner.nextLine();

System.out.print("State (2 characters): ");
String state = scanner.nextLine();

System.out.print("Zip Code (5 digits): ");
String zipCode = scanner.nextLine();

System.out.print("Hire Date (MM DD YYYY): ");
int month = scanner.nextInt();
int day = scanner.nextInt();
int year = scanner.nextInt();

scanner.nextLine(); // Consume the newline

// Create Name, Address, and Date objects
Name name = new Name(firstName, lastName);
Address address = new Address(street, city, state, zipCode);
```

```
            Date hireDate = new Date(month, day, year);


            // Create an Employee object and store it in the array
            employees[i] = new Employee(empNumber, name, address, hireDate);
        }


        System.out.println("\nEmployee Details:");
        for (Employee employee : employees) {
            System.out.println(employee);
        }


        scanner.close();
    }//end class
}//end main
```

//Output