1.Java Program: Are you above 18 years old?

Sample Output: Please enter your age: 21

You are eligible to vote.

```
package Day2ClassTask;

import java.util.Scanner;

public class Agecheck1 {

    public static void main(String[] args) {
            Scanner scan= new Scanner(System.in);
            System.out.print("Please enter your age: ");
            int age=scan.nextInt();
            if(age>18 || age==18)
            {
                    System.out.println("you are eligible to vote");
            }
            else
            {
                    System.out.println("you are not eligible to vote");
            }
            scan.close();
    }

}
```

2. Java Program: Print Multiplication Table Using for Loop

Sample Output: Enter a number to print its multiplication table: 7
Multiplication table for 7:

7 x 1 = 7

7 x 2 = 14

7 x 3 = 21

7 x 4 = 28

7 x 5 = 35

7 x 6 = 42

7 x 7 = 49

7 x 8 = 56

7 x 9 = 63

7 x 10 = 70

```
package Day2ClassTask;

import java.util.Scanner;

public class Table1s1 {

	public static void main(String[] args) {
		Scanner scan=new Scanner(System.in);
		System.out.print("Enter the  number: ");
		int num=scan.nextInt();
		for(int i=1;i<=10;i++)
```

```
		{
			System.out.println(num+"x"+i+"="+(num*i));
		}
		scan.close();
	}

}
```

3. Java Program: Character, String, and Boolean Input Example

Sample Output:

Enter a single character: A Enter your name: Alice

Do you like programming? (true/false): true

--- User Input Summary ---

Character entered: A

Name entered: Alice

Likes programming: true Great! Keep coding, Alice!

```
package Day2ClassTask;

import java.util.Scanner;

public class CharBooleanStr1s2 {

	public static void main(String[] args) {
		Scanner scan=new Scanner(System.in);
		System.out.print("Enter a single character: ");
```

```
        char ch=scan.next().charAt(0);
        System.out.print("Enter your name: ");
        String name=scan.nextLine();
        System.out.print("Do you like programming? (true/false): ");
        boolean like=scan.nextBoolean();
        if(like)
            System.out.println("Great! keep coding, "+name+"!");
        else
            System.out.println("Give it some time, "+name+"!");


    }

}
```

Task: Simple Banking Operations using switch Case

Objective: Create a Java program that simulates simple banking operations like checking balance, depositing money, and withdrawing money using a switch case statement.

Requirements:

- Use the Scanner class to accept user input.
- Use switch case to perform operations based on the user's menu choice.
- Maintain a balance variable that gets updated based on operations.
- Handle invalid inputs gracefully.

Sample Output:

Welcome to ABC Bank

1. Check Balance

2. Deposit Money

3. Withdraw Money

4. Exit

Enter your choice: 2

Enter amount to deposit: 5000

Deposit successful!

Enter your choice: 1

Your current balance is: ₹5000

Enter your choice: 3

Enter amount to withdraw: 2000

Withdrawal successful!

Enter your choice: 1

Your current balance is: ₹3000

Enter your choice: 4

Thank you for using ABC Bank!

```
package Day2ClassTask;

import java.util.Scanner;

public class SimplebankingTask2 {

	public static void main(String[] args) {
		Scanner scanner = new Scanner(System.in);
	int balance = 0;
	int choice;
```

```
do {
    System.out.println("\nWelcome to ABC Bank");
    System.out.println("1. Check Balance");
    System.out.println("2. Deposit Money");
    System.out.println("3. Withdraw Money");
    System.out.println("4. Exit");
    System.out.print("Enter your choice: ");
    choice = scanner.nextInt();

    switch (choice) {
        case 1:
            System.out.println("Your current balance is: ₹" + balance);
            break;

        case 2:
            System.out.print("Enter amount to deposit: ");
            int deposit = scanner.nextInt();
            if (deposit > 0) {
                balance += deposit;
                System.out.println("Deposit successful!");
            } else {
                System.out.println("Invalid deposit amount!");
            }
            break;

        case 3:
```

```
            System.out.print("Enter amount to withdraw: ");
            int withdraw = scanner.nextInt();
            if (withdraw > 0 && withdraw <= balance) {
               balance -= withdraw;
               System.out.println("Withdrawal successful!");
            } else {
               System.out.println("Invalid or Insufficient Balance!");
            }
            break;

         case 4:
            System.out.println("Thank you for using ABC Bank!");
            break;

         default:
            System.out.println("Invalid choice. Please try again.");
      }

   } while (choice != 4);

   scanner.close();

      }

}
```

1. **String Concatenation**

   Scenario: Welcome Message Generator

   Task: Create a program that takes user input for first name and last name and displays a welcome message using string concatenation.

2. **StringBuilder**

   Scenario: Efficient String Reversal

   Task: Write a program to reverse a user-entered sentence using StringBuilder.

3. **String API**

   Scenario: Email Validation System

   Task: Use String methods to check if the entered email is valid (contains @ and ends with .com).

4. **Date**

   Scenario: Display Current Date

   Task: Create a program that displays the current system date in dd-MM-yyyy format.

5. **Time**

   Scenario: Show Current Time of Login Task: Display the current login time in HH:mm:ss format.

6. **Numeric Object**

   Scenario: Process Student Scores

   Task: Convert string input to numeric types and perform calculations (average, max, etc.).

```
package Day2ClassTask;

import java.time.LocalDate;
import java.time.LocalTime;
import java.time.format.DateTimeFormatter;
import java.util.Scanner;

public class StringTask3 {

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

      // 1. String Concatenation
      System.out.println("Welcome Message Generator");
      System.out.print("Enter First Name: ");
      String firstName = sc.nextLine();
      System.out.print("Enter Last Name: ");
      String lastName = sc.nextLine();
      System.out.println("Welcome, " + firstName + " " + lastName + "!");
      System.out.println("-----------------------------------------------");

      // 2. StringBuilder - Reverse a string
      System.out.println("String Reversal using StringBuilder");
      System.out.print("Enter a sentence to reverse: ");
      String input = sc.nextLine();
```

```
        StringBuilder sb = new StringBuilder(input);
        System.out.println("Reversed: " + sb.reverse());
        System.out.println("-----------------------------------------------");

        // 3. String API - Email Validation
        System.out.println("Email Validation");
        System.out.print("Enter your email: ");
        String email = sc.nextLine();
        if (email.contains("@") && email.endsWith(".com")) {
            System.out.println("Valid email!");
        } else {
            System.out.println("Invalid email!");
        }
        System.out.println("-----------------------------------------------");

        // 4. Date - Show Current Date
        System.out.println("Current Date Display");
        LocalDate currentDate = LocalDate.now();
        DateTimeFormatter dateFormat = DateTimeFormatter.ofPattern("dd-
MM-yyyy");
        System.out.println("Today's date: " +
currentDate.format(dateFormat));
        System.out.println("-----------------------------------------------");

        // 5. Time - Show Login Time
        System.out.println("Current Time Display");
        LocalTime currentTime = LocalTime.now();
```

```
        DateTimeFormatter timeFormat =
DateTimeFormatter.ofPattern("HH:mm:ss");
        System.out.println("Login time: " + currentTime.format(timeFormat));
        System.out.println("-----------------------------------------------");

        // 6. Numeric Object - Process Student Scores
        System.out.println("Process Student Scores");
        System.out.print("Enter first score: ");
        int score1 = Integer.parseInt(sc.nextLine());
        System.out.print("Enter second score: ");
        int score2 = Integer.parseInt(sc.nextLine());
        System.out.print("Enter third score: ");
        int score3 = Integer.parseInt(sc.nextLine());

        int total = score1 + score2 + score3;
        int average = total / 3;
        int max = Math.max(score1, Math.max(score2, score3));

        System.out.println("Total: " + total);
        System.out.println("Average: " + average);
        System.out.println("Highest Score: " + max);

        sc.close();

    }

}
```