Day2_Java_Assignment1

1. Primitive Data Types

```
package JavaAssigments_Day2;

public class PrimitiveDataTypes {

    public static void main(String[] args) {

        int age = 25;

        float height = 5.9f;

        double weight = 68.5;


        System.out.println("Age: " + age);

        System.out.println("Height: " + height);

        System.out.println("Weight: " + weight);

    }

}
```

2. Variables

```
package JavaAssigments_Day2;

public class StudentInfo {

    public static void main(String[] args) {

        int id = 101;

        String name = "Arun";

        double marks = 89.5;

        char grade = 'A';


        System.out.println("Student ID: " + id);

        System.out.println("Name: " + name);

        System.out.println("Marks: " + marks);

        System.out.println("Grade: " + grade);

    }

}
```

3. Operators

```
package JavaAssigments_Day2;

public class OperatorExample {

    public static void main(String[] args) {

        int number1 = 10;

        int number2 = 20;
```

```
        // Arithmetic operation
        int sum = number1 + number2;
        System.out.println("Addition: " + sum);

        // Relational operation
        int greater = (number1 > number2) ? number1 : number2;
        System.out.println("Greater number: " + greater);

        // Logical operation
        boolean bothPositive = (number1 > 0 && number2 > 0);
        System.out.println("Are both positive? " + bothPositive);
    }
}
```

4.String Concatenation

```
package JavaAssigments_Day2;


public class GreetingMessage {
    public static void main(String[] args) {
        String firstName = "Ravi";
        String lastName = "Kumar";

        String message = "Hello, " + firstName + " " + lastName + "! Welcome to the system.";
        System.out.println(message);
    }
}
```

5. StringBuilder

```
package JavaAssigments_Day2;
public class ReverseString {
   public static void main(String[] args) {
        String input = "Hello Java Learners";
        StringBuilder sb = new StringBuilder(input);

        System.out.println("Original: " + input);
        System.out.println("Reversed: " + sb.reverse());
    }
}
```

6. String API

```
package JavaAssigments_Day2;

public class CharacterCount {

    public static void main(String[] args) {

        String str = "banana";

        char target = 'a';

        int count = 0;


        for (int i = 0; i < str.length(); i++) {

            if (str.charAt(i) == target) {

                count++;

            }

        }


        System.out.println("Character '" + target + "' appears " + count + " times.");

    }

}
```

7. Date, Time, and Numeric Objects

```
package JavaAssigments_Day2;

import java.time.LocalDate;

import java.time.format.DateTimeFormatter;

import java.text.NumberFormat;

import java.util.Locale;


public class DateAndCurrency {

    public static void main(String[] args) {

        // Current date formatted

        LocalDate currentDate = LocalDate.now();

        DateTimeFormatter formatter = DateTimeFormatter.ofPattern("dd-MM-yyyy");

        System.out.println("Current Date: " + currentDate.format(formatter));


        // Currency formatting

        double amount = 12345.678;

        NumberFormat currencyFormatter = NumberFormat.getCurrencyInstance(new Locale("en",
"IN"));

        System.out.println("Formatted Amount: " + currencyFormatter.format(amount));
```

```
    }
}
```

8. Flow Control

```
package JavaAssigments_Day2;

import java.util.Scanner;

public class NumberCheck {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter a number: ");

        int number = sc.nextInt();


        if (number > 0) {

            System.out.println("The number is positive.");

        } else if (number < 0) {

            System.out.println("The number is negative.");

        } else {

            System.out.println("The number is zero.");

        }


        sc.close();

    }

}
```

9. Conditions

```
package JavaAssigments_Day2;

import java.util.Scanner;

public class GradeCheck {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter marks: ");

        int marks = sc.nextInt();

        char grade;


        if (marks >= 90) {

            grade = 'A';

        } else if (marks >= 75) {

            grade = 'B';
```

```
        } else if (marks >= 60) {
            grade = 'C';
        } else if (marks >= 40) {
            grade = 'D';
        } else {
            grade = 'F';
        }

        System.out.println("Grade: " + grade);
        sc.close();
    }
}
```

10. Switch

```
package JavaAssigments_Day2;

import java.util.Scanner;

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

        System.out.print("Enter first number: ");
        int number1 = sc.nextInt();

        System.out.print("Enter second number: ");
        int number2 = sc.nextInt();

        System.out.print("Enter operation (+, -, *, /): ");
        char operator = sc.next().charAt(0);

        int result;

        switch (operator) {
            case '+':
                result = number1 + number2;
                break;
            case '-':
                result = number1 - number2;
```

```
                break;
            case '*':
                result = number1 * number2;
                break;
            case '/':
                if (number2 != 0)
                    result = number1 / number2;
                else {
                    System.out.println("Cannot divide by zero.");
                    sc.close();
                    return;
                }
                break;
            default:
                System.out.println("Invalid operator");
                sc.close();
                return;
        }

        System.out.println("Result: " + result);
        sc.close();
    }
}
```

11. Loops and Branching

```
package JavaAssigments_Day2;

import java.util.Scanner;

public class EvenNumbers {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter the value of N: ");
        int N = sc.nextInt();

        int count = 0;
        int number = 0;

        System.out.println("First " + N + " even numbers:");
```

```
        while (count < N) {
            System.out.print(number + " ");
            number += 2;
            count++;
        }
       sc.close();
    }
}
```

12. Arrays

```
package JavaAssigments_Day2;

import java.util.Scanner;

public class ArrayAverage {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int[] numbers = new int[5];
        int sum = 0;

        System.out.println("Enter 5 numbers:");
        for (int i = 0; i < 5; i++) {
            numbers[i] = sc.nextInt();
            sum += numbers[i];
        }

        double average = sum / 5.0;
        System.out.println("Average: " + average);

        sc.close();
    }
}
```

13. Enum

```
package JavaAssigments_Day2;

import java.util.Scanner;

public class EnumExample {
    enum Day {
        MONDAY, TUESDAY, WEDNESDAY, THURSDAY, FRIDAY, SATURDAY, SUNDAY
    }
```

```
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter a day (e.g., MONDAY): ");
        String input = sc.next().toUpperCase();

        Day day = Day.valueOf(input);

        switch (day) {
            case MONDAY:
                System.out.println("Start of the work week!");
                break;
            case FRIDAY:
                System.out.println("Almost weekend!");
                break;
            case SUNDAY:
                System.out.println("Relax, it's Sunday!");
                break;
            default:
                System.out.println("It's a regular day.");
        }

        sc.close();
    }
}
```

14. OOPs Concepts

```
package JavaAssigments_Day2;

import java.util.Scanner;

class Student {
    String name;
    int marks;

    void readData() {
        Scanner sc = new Scanner(System.in);
```

```
        System.out.print("Enter name: ");
        name = sc.nextLine();
        System.out.print("Enter marks: ");
        marks = sc.nextInt();
    }

    void displayData() {
        System.out.println("Student Name: " + name);
        System.out.println("Marks: " + marks);
    }
}

public class StudentDemo {
    public static void main(String[] args) {
        Student s = new Student();
        s.readData();
        s.displayData();
    }
}
```