**Task 1: ODD OR EVEN**

import java.util.Scanner;

public class OddOrEven {

    public class OddEven {

        public static void main(String[] args) {

            Scanner userInput = new Scanner(System.in);

            System.out.print("Enter a number: "); // Program ask for a number

            int number = userInput.nextInt();

            if (number % 2 == 0) { // Program determine if the number is odd or even

                System.out.println  ("Output: Even.");

            } else {

                System.out.println("Output: Odd.");

            }

            userInput.close(); // Program close the scanner

        }

    }

}

* The program starts by creating a Scanner object to read input from the user.
* It prompts the user to enter a number.
* The program uses the modulus operator (%) to determine if the number is odd or even.
* If the number is even (i.e., the remainder when divided by 2 is 0), it prints "Even."
* Otherwise, it prints "Odd."
* Finally, it closes the Scanner object.

**Task 2: WHAT DAY?**

import java.util.Scanner;

public class Days {

    public static void main(String[] args) { // WAP to input a number (1-7) and print the day of the week using switch case

        Scanner sc = new Scanner(System.in); // Create a Scanner object to read input from the user

        System.out.println("Enter the day number: "); //1-7

        int day = sc.nextInt();

        switch (day) {

            case 1: //case 1 is the day number

                System.out.println("Monday"); //Monday is the day name

                break;

            case 2: //case 2 is the day number

                System.out.println("Tuesday"); //Tuesday is the day name

                break;

            case 3: //case 3 is the day number

                System.out.println("Wednesday"); //Wednesday is the day name

                break;

            case 4: //case 4 is the day number

                System.out.println("Thursday"); //Thursday is the day name

                break;

            case 5: //case 5 is the day number

                System.out.println("Friday"); //Friday is the day name

                break;

            case 6: //case 6 is the day number

                System.out.println("Saturday"); //Saturday is the day name

                break;

case 7: //case 7 is the day number

                System.out.println("Sunday"); //Sunday is the day name

                break;

            default: //default is the day number

                System.out.println("Invalid day"); //Invalid day is the day name

        }

        sc.close();

    }

}

* The program starts by creating a Scanner object to read input from the user.
* It prompts the user to enter a number (1-7).
* The program uses a switch statement to determine the day of the week based on the input number.
* It prints the corresponding day name.
* If the input number is not between 1 and 7, it prints "Invalid day".
* Finally, it closes the Scanner object.

**TASK 3: SUM OF ALL INTEGER**

import java.util.Scanner;

public class SumOfList {

    public static void main(String[] args) {

        //input a number n and print the sum of first n natural numbers

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter the number of integers to sum: "); //input

        int n = sc.nextInt();

        int sum = 0;

        //logic

        if (n <= 0) {

            System.out.println("Invalid input");

        } else {

            for (int i = 1; i <= n; i++) {

                sum += i;

            }

            System.out.println("Sum of the numbers is: " + sum); //output

        }

        sc.close();

    }

* The program starts by creating a Scanner object to read input from the user.
* It prompts the user to enter a number.
* The program initializes a sum variable to 0.
* It then enters a for loop that iterates from 1 to n.
* Inside the loop, it adds the current value of i to the sum.
* After the loop, it displays the result.
* Finally, it closes the Scanner object.

**TASK 4: GUESS THE NUMBER**

import java.util.Scanner;

import java.util.Random;

public class NumberGuess {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in); //input

        Random rand = new Random(); //logic

        boolean playAgain = true;

        while (playAgain) { // while loop to play again

            int numberToGuess = rand.nextInt(100) + 1;

            int numberOfTries = 0;

            System.out.println("I'm thinking of a number between 1 and 100.");

            while (numberOfTries < 3) { //while loop to guess the number

                System.out.print("Enter your guess: ");

                int guess = sc.nextInt();

                numberOfTries++;

                if (guess == numberToGuess) { //if the guess is correct

                    System.out.println("Congratulations! You've guessed the number in " + numberOfTries + " tries!");

                } else if (guess < numberToGuess) {

                    System.out.println("Too low! Try again.");

                } else {

                    System.out.println("Too high! Try again.");

                }

            }

            System.out.print("Do you want to play again? (yes/no): "); //output

            String playAgainResponse = sc.next().toLowerCase();

            playAgain = playAgainResponse.equals("yes") || playAgainResponse.equals("y");

        }

        System.out.println("Thanks for playing!");

        sc.close();

    }

}

* The program starts by creating a Scanner object to read input from the user.
* It also creates a Random object to generate random numbers.
* The program enters a while loop that continues until the user decides to stop playing.
* Inside the loop, it generates a random number between 1 and 100.
* It then enters another while loop that continues until the user has guessed the number or used up their three tries.
* Inside this loop, it prompts the user to enter a guess and increments the number of tries.

**TASK 5: REVERSE ARRAY**

import java.util.Scanner;

public class ReverseArray {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter the number of elements in the array: ");

        int n = sc.nextInt();

        int[] array = new int[n];

        System.out.print("Enter the elements of the array:");

        for (int i = 0; i < n; i++) {

            array[i] = sc.nextInt();

        }

        int[] reversedArray = reverseArray(array);

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

            System.out.print(reversedArray[i] + " ");

        }

        sc.close();

    }

    public static int[] reverseArray(int[] array) {

        int[] reversedArray = new int[array.length];

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

            reversedArray[i] = array[array.length - i - 1];

        }

        return reversedArray;

    }

}

* The program starts by creating a Scanner object to read input from the user.
* It prompts the user to enter the number of elements in the array.
* The program creates an array of the specified size.
* It prompts the user to enter the elements of the array.
* The program then calls the reverseArray method to reverse the array.
* The reverseArray method creates a new array of the same size.
* It then enters a for loop that iterates through each element of the original array.