LEVEL 3 : PRACTICE

import java.util.Scanner;

public class Level3Practice {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Question 1: Convert Celsius to Fahrenheit

System.out.print("Enter temperature in Celsius: ");

double celsius = scanner.nextDouble();

double fahrenheitResult = (celsius \* 9/5) + 32;

System.out.println(celsius + " Celsius is " + fahrenheitResult + " Fahrenheit");

// Question 2: Convert Fahrenheit to Celsius

System.out.print("Enter temperature in Fahrenheit: ");

double fahrenheit = scanner.nextDouble();

double celsiusResult = (fahrenheit - 32) \* 5/9;

System.out.println(fahrenheit + " Fahrenheit is " + celsiusResult + " Celsius");

// Question 3: Calculate total income with salary and bonus

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

double salary = scanner.nextDouble();

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

double bonus = scanner.nextDouble();

double totalIncome = salary + bonus;

System.out.println("Total Income: INR " + totalIncome);

// Question 4: Swap two numbers

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

int num1 = scanner.nextInt();

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

int num2 = scanner.nextInt();

int temp = num1;

num1 = num2;

num2 = temp;

System.out.println("Swapped numbers: " + num1 + " and " + num2);

// Question 5: Rewrite program with user inputs (Example for distance calculation omitted)

// Question 6: Athlete running rounds

System.out.print("Enter side1, side2, side3 of the triangular path: ");

double side1 = scanner.nextDouble();

double side2 = scanner.nextDouble();

double side3 = scanner.nextDouble();

double perimeter = side1 + side2 + side3;

double rounds = 5 / perimeter;

System.out.println("Total rounds needed to complete 5 km: " + rounds);

// Question 7: Divide chocolates among children

System.out.print("Enter number of chocolates: ");

int chocolates = scanner.nextInt();

System.out.print("Enter number of children: ");

int children = scanner.nextInt();

int chocolatesPerChild = chocolates / children;

int remainingChocolates = chocolates % children;

System.out.println("Each child gets " + chocolatesPerChild + " chocolates, remaining: " + remainingChocolates);

// Question 8: Calculate simple interest

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

double principal = scanner.nextDouble();

System.out.print("Enter Rate of Interest: ");

double rate = scanner.nextDouble();

System.out.print("Enter Time in years: ");

double time = scanner.nextDouble();

double simpleInterest = (principal \* rate \* time) / 100;

System.out.println("Simple Interest: " + simpleInterest);

// Question 9: Maximum handshakes in a group of students

System.out.print("Enter number of students: ");

int students = scanner.nextInt();

int handshakes = (students \* (students - 1)) / 2;

System.out.println("Maximum handshakes: " + handshakes);

// Question 10: Convert weight from pounds to kilograms

System.out.print("Enter weight in pounds: ");

double weightPounds = scanner.nextDouble();

double weightKg = weightPounds \* 0.453592;

System.out.println("Weight in kilograms: " + weightKg);

scanner.close();

}

}