JAVA PROJECT-1: CALCULATOR

import java.util.Scanner;

public class Cal {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.println("Simple Java Calculator");

System.out.println("----------------------");

while (true) {

System.out.println("\nAvailable operations:");

System.out.println("1. Addition (+)");

System.out.println("2. Subtraction (-)");

System.out.println("3. Multiplication (\*)");

System.out.println("4. Division (/)");

System.out.println("5. Exit");

System.out.print("Choose an operation (1-5): ");

int choice;

try {

choice = scanner.nextInt();

} catch (Exception e) {

System.out.println("Invalid input. Please enter a number between 1-5.");

scanner.next(); // clear the invalid input

continue;

}

if (choice == 5) {

System.out.println("Exiting calculator. Goodbye!");

break;

}

if (choice < 1 || choice > 5) {

System.out.println("Invalid choice. Please select between 1-5.");

continue;

}

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

double num1 = scanner.nextDouble();

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

double num2 = scanner.nextDouble();

double result = 0;

String operation = "";

switch (choice) {

case 1:

result = num1 + num2;

operation = "+";

break;

case 2:

result = num1 - num2;

operation = "-";

break;

case 3:

result = num1 \* num2;

operation = "\*";

break;

case 4:

if (num2 == 0) {

System.out.println("Error: Division by zero is not allowed.");

continue;

}

result = num1 / num2;

operation = "/";

break;

}

System.out.printf("\nResult: %.2f %s %.2f = %.2f%n", num1, operation, num2, result);

} scanner.close(); } }

JAVA PROJEC-2: CURRENCY CONVERTER

import java.util.Scanner;

import java.text.DecimalFormat;

public class Currency {

private static final double USD\_TO\_EUR = 0.85;

private static final double USD\_TO\_GBP = 0.73;

private static final double USD\_TO\_JPY = 110.25;

private static final double USD\_TO\_INR = 74.50;

private static final double EUR\_TO\_USD = 1.18;

private static final double GBP\_TO\_USD = 1.37;

private static final double JPY\_TO\_USD = 0.0091;

private static final double INR\_TO\_USD = 0.013;

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

DecimalFormat df = new DecimalFormat("#.##");

System.out.println("Welcome to Currency Converter");

System.out.println("1. USD to EUR");

System.out.println("2. USD to GBP");

System.out.println("3. USD to JPY");

System.out.println("4. USD to INR");

System.out.println("5. EUR to USD");

System.out.println("6. GBP to USD");

System.out.println("7. JPY to USD");

System.out.println("8. INR to USD");

System.out.println("9. Exit");

boolean running = true;

while (running) {

System.out.print("\nChoose an option (1-9): ");

int choice = scanner.nextInt();

if (choice == 9) {

running = false;

System.out.println("Thank you for using Currency Converter. Goodbye!");

continue;

}

if (choice < 1 || choice > 8) {

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

continue;

}

System.out.print("Enter amount to convert: ");

double amount = scanner.nextDouble();

double convertedAmount = 0;

String fromCurrency = "";

String toCurrency = "";

switch (choice) {

case 1:

convertedAmount = amount \* USD\_TO\_EUR;

fromCurrency = "USD";

toCurrency = "EUR";

break;

case 2:

convertedAmount = amount \* USD\_TO\_GBP;

fromCurrency = "USD";

toCurrency = "GBP";

break;

case 3:

convertedAmount = amount \* USD\_TO\_JPY;

fromCurrency = "USD";

toCurrency = "JPY";

break;

case 4:

convertedAmount = amount \* USD\_TO\_INR;

fromCurrency = "USD";

toCurrency = "INR";

break;

case 5:

convertedAmount = amount \* EUR\_TO\_USD;

fromCurrency = "EUR";

toCurrency = "USD";

break;

case 6:

convertedAmount = amount \* GBP\_TO\_USD;

fromCurrency = "GBP";

toCurrency = "USD";

break;

case 7:

convertedAmount = amount \* JPY\_TO\_USD;

fromCurrency = "JPY";

toCurrency = "USD";

break;

case 8:

convertedAmount = amount \* INR\_TO\_USD;

fromCurrency = "INR";

toCurrency = "USD";

break;

}

System.out.println(amount + " " + fromCurrency + " = " + df.format(convertedAmount) + " " + toCurrency);

}

scanner.close();

}

}