import java.util.Scanner;

public class TemperatureConverter {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Get temperature value from the user

System.out.print("Enter temperature value: ");

double temperature = scanner.nextDouble();

// Get temperature unit from the user

System.out.print("Enter temperature unit (C for Celsius, F for Fahrenheit): ");

char unit = scanner.next().charAt(0);

// Check for valid unit input

if (unit != 'C' && unit != 'F') {

System.out.println("Invalid temperature unit. Please enter C or F.");

return;

}

// Perform temperature conversion

double convertedTemperature;

if (unit == 'C') {

convertedTemperature = celsiusToFahrenheit(temperature);

System.out.println(temperature + " Celsius is equal to " + convertedTemperature + " Fahrenheit.");

} else {

convertedTemperature = fahrenheitToCelsius(temperature);

System.out.println(temperature + " Fahrenheit is equal to " + convertedTemperature + " Celsius.");

}

}

// Celsius to Fahrenheit conversion

private static double celsiusToFahrenheit(double celsius) {

return (celsius \* 9 / 5) + 32;

}

// Fahrenheit to Celsius conversion

private static double fahrenheitToCelsius(double fahrenheit) {

return (fahrenheit - 32) \* 5 / 9;

}

}