using System;

using System.Windows.Forms;

namespace WeeklyPayCalculator

{

public partial class MainForm : Form

{

public MainForm()

{

InitializeComponent();

}

private void calculateButton\_Click(object sender, EventArgs e)

{

// Get user input

int hours;

if (!int.TryParse(hoursTextBox.Text, out hours))

{

MessageBox.Show("Invalid input for hours worked.", "Error", MessageBoxButtons.OK, MessageBoxIcon.Error);

return;

}

double rate;

if (!double.TryParse(rateTextBox.Text, out rate))

{

MessageBox.Show("Invalid input for hourly rate.", "Error", MessageBoxButtons.OK, MessageBoxIcon.Error);

return;

}

// Calculate weekly pay

double weeklyPay = CalculateWeeklyPay(hours, rate);

// Display the result

resultLabel.Text = "Weekly pay: $" + weeklyPay.ToString("0.00");

}

private double CalculateWeeklyPay(int hoursWorked, double hourlyRate)

{

if (hoursWorked < 20)

{

throw new Exception("Insufficient hours worked. Please work at least 20 hours per week.");

}

else if (hoursWorked > 50)

{

throw new Exception("Exceeded maximum hours allowed. Please work no more than 50 hours per week.");

}

int regularHours = Math.Min(hoursWorked, 40);

int overtimeHours1 = Math.Min(Math.Max(hoursWorked - 40, 0), 5);

int overtimeHours2 = Math.Max(hoursWorked - 45, 0);

double regularPay = regularHours \* hourlyRate;

double overtimePay1 = overtimeHours1 \* hourlyRate \* 1.5;

double overtimePay2 = overtimeHours2 \* hourlyRate \* 2;

double totalPay = regularPay + overtimePay1 + overtimePay2;

return totalPay;

}

}

}