**CS/IS 3023 Assignment 3 12 points**

**Due: 2/10**

Email your finished answers and to me at [harringp@nsuok.edu](mailto:harringp@nsuok.edu)

You are welcome to copy and paste your .vb source code below or attach your .vb source code to the email.

**Chapter 3 continued:**

1. Define *variable.*

Variable is a value assigned to a dimension or any declared data.

1. Give an example of a line of code to declare a variable to hold an integer.

Dim integerNumber As Integer = 3

1. Give an example of a line of code to hold a string.

Dim stringDataType As String

1. Define *integer data type* .

Integer data type is a non-fraction number data type

1. Write a line of code to declare an integer literal type variable.

Dim integerLiteral As Integer = 20

1. Write a line of code to declare a *Boolean data type.*

Dim booleanData As Boolean = True

1. What are the two values that can be stored in a Boolean data type.

True and False

1. Define *char data type*.

Char data type is a single character/symbol data type

1. Define *string data type.*

String data type is a sequence of character data type (usually used for text sentence)

1. Define and write a line of code to declare a *date data type.*

Dim dateDataType As New System.DateTime(2020, 2, 10, 11, 14, 0)

1. Write a line of code to add two integer variables together.

Dim integerOne As Integer = 3

Dim integerTwo As Integer = 5

Dim integerThree As Integer

integerThree = integerOne + integerTwo

1. Do Tutorial 3-4 on page 155.

Public Class Form1

Private Sub Label1\_Click(sender As Object, e As EventArgs) Handles Label1.Click

End Sub

Private Sub Button1\_Click(sender As Object, e As EventArgs) Handles Button1.Click

Dim dblBill As Double = 0.0

Dim dblTip As Double = 0.0

dblBill = CDbl(TextBox1.Text)

dblTip = dblBill \* 0.15

Label2.Text = CStr(dblTip)

End Sub

Private Sub Label3\_Click(sender As Object, e As EventArgs)

End Sub

Private Sub Button2\_Click(sender As Object, e As EventArgs) Handles Button2.Click

Dim dblBill As Double = 0.0

Dim dblTip As Double = 0.0

dblBill = CDbl(TextBox1.Text)

dblTip = dblBill \* 0.2

Label2.Text = CStr(dblTip)

End Sub

Private Sub Button3\_Click(sender As Object, e As EventArgs) Handles Button3.Click

Dim dblBill As Double = 0.0

Dim dblTip As Double = 0.0

dblBill = CDbl(TextBox1.Text)

dblTip = dblBill \* 0.25

Label2.Text = CStr(dblTip)

End Sub

Private Sub Button4\_Click(sender As Object, e As EventArgs) Handles Button4.Click

Me.Close()

End Sub

End Class

1. Define *local variable*

local variable is a variable which is either a variable declared within the function or is an argument passed to a function.

1. Do Tutorial 3-8 on page 177. Pay attention to the try…catch code on page 181.

Public Class Form1

Private Sub Label1\_Click(sender As Object, e As EventArgs) Handles Label1.Click

End Sub

Private Sub Button1\_Click(sender As Object, e As EventArgs) Handles Button1.Click

Dim decAnnualSalary As Decimal ' Annual salary

Dim intPayPeriods As Integer ' Number of pay periods

Dim decSalary As Decimal ' Salary per pay period

Try

' Get the annual salary and number of pay periods.

decAnnualSalary = CDec(TextBox1.Text)

intPayPeriods = CInt(TextBox2.Text)

' Calculate the salary per pay period.

decSalary = decAnnualSalary / intPayPeriods

' Display the salary per pay period.

Label4.Text = decSalary.ToString("c")

Catch

' Display an error message.

MessageBox.Show("Error: Be sure to enter nonzero " &

"numeric values.")

End Try

End Sub

End Class