

Question 1:

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Public Class Form1 ' Ilker Hadzhalaran

    Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load
        chkShowAll.Checked = False
        radRed.Checked = True
        radYellow.Checked = False
    End Sub

    Private Sub btnAdd_Click(sender As Object, e As EventArgs) Handles btnAdd.Click

        Dim strItemName As String
        Dim intQuantity As Integer
        Dim dblPostedPrice As Double
        Dim dblSubtotal As Double
        Dim dblTotalAmount As Double

        If Not Integer.TryParse(txtQuantity.Text, intQuantity) Then
            MsgBox("Please enter quantity as an integer number.")
        ElseIf Not Double.TryParse(txtPostedPrice.Text, dblPostedPrice) Then
            MsgBox("Please enter the posted price as a number.")
        End If

        strItemName = txtItemName.Text
        intQuantity = CInt(txtQuantity.Text)
        dblPostedPrice = CDb1(txtPostedPrice.Text)

        dblSubtotal = price(strItemName, intQuantity, dblPostedPrice)

        dblTotalAmount = dblSubtotal * 1.13

        If chkShowAll.Checked Then
            lblShowAll.Text = "Subtotal: " & dblSubtotal.ToString("c") & ", HST: " &
            (dblSubtotal * 0.13).ToString("c") & ", Total Amount: " & dblTotalAmount.ToString("c")
        End If

        lstItems.Items.Add("Item Name: " & strItemName)
        lstItems.Items.Add("Quantity: " & intQuantity.ToString("f0"))
        lstItems.Items.Add("Posted Price: " & dblPostedPrice.ToString("c"))
        lstItems.Items.Add("Total Amount: " & dblTotalAmount.ToString("c"))

        txtItemName.Text = String.Empty
        txtPostedPrice.Text = String.Empty
        txtQuantity.Text = String.Empty
    End Sub

    Private Function price(ByVal strItemName As String, ByVal intQuantity As Integer,
        dblPostedPrice As Double)
```

```

Dim dblSubtotal As Double

If radRed.Checked Then

    If intQuantity = 1 Then
        dblSubtotal = intQuantity * dblPostedPrice * 0.8
    ElseIf intQuantity = 2 Then
        dblSubtotal = intQuantity * dblPostedPrice * 0.7
    ElseIf intQuantity = 3 Then
        dblSubtotal = intQuantity * dblPostedPrice * 0.6
    Else
        dblSubtotal = intQuantity * dblPostedPrice
    End If

ElseIf radYellow.Checked Then

    If intQuantity = 2 Then
        dblSubtotal = intQuantity * dblPostedPrice * 0.9
    ElseIf intQuantity > 2 Then
        dblSubtotal = intQuantity * dblPostedPrice * 0.85
    Else
        dblSubtotal = intQuantity * dblPostedPrice
    End If

End If

Return dblSubtotal

End Function

Private Sub btnExit_Click(sender As Object, e As EventArgs) Handles btnExit.Click
    Me.Close()
End Sub

Private Sub btnClear_Click(sender As Object, e As EventArgs) Handles btnClear.Click
    txtItemName.Text = String.Empty
    txtPostedPrice.Text = String.Empty
    txtQuantity.Text = String.Empty
    radRed.Checked = True
    chkShowAll.Checked = False
    lstItems.Items.Clear()
    lblShowAll.Text = String.Empty
End Sub
End Class

```

Form1

Enter the Item's Name, Quantity and Posted Price:

☐ Show Subtotal, HST and Total Amount

Sale Type

☒ RED

☐ YELLOW

Item Name: Item
Quantity: 1
Posted Price: \$10.00
Total Amount: \$9.04

Add Clear Exit

Form1

Enter the Item's Name, Quantity and Posted Price:

☒ Show Subtotal, HST and Total Amount

Sale Type

☒ RED

☐ YELLOW

Item Name: Item
Quantity: 1
Posted Price: \$10.00
Total Amount: \$9.04

Subtotal: \$8.00, HST: \$1.04, Total Amount: \$9.04

Add Clear Exit

Form1

Enter the Item's Name, Quantity and Posted Price:

☒ Show Subtotal, HST and Total Amount

Sale Type

☒ RED

☐ YELLOW

Item Name: Jacket
Quantity: 2
Posted Price: \$10.00
Total Amount: \$15.82

Subtotal: \$14.00, HST: \$1.82, Total Amount: \$15.82

Form1

Enter the Item's Name, Quantity and Posted Price:

☒ Show Subtotal, HST and Total Amount

Sale Type

☒ RED

☐ YELLOW

Item Name: Sweater
Quantity: 3
Posted Price: \$10.00
Total Amount: \$20.34

Subtotal: \$18.00, HST: \$2.34, Total Amount: \$20.34

Form1

Enter the Item's Name, Quantity and Posted Price:

☒ Show Subtotal, HST and Total Amount

Sale Type

☐ RED

☒ YELLOW

Item Name: Other
Quantity: 2
Posted Price: \$10.00
Total Amount: \$20.34

Subtotal: \$18.00, HST: \$2.34, Total Amount: \$20.34

Form1

Enter the Item's Name, Quantity and Posted Price:

☒ Show Subtotal, HST and Total Amount

Sale Type

☐ RED

☒ YELLOW

Item Name: Other
Quantity: 4
Posted Price: \$10.00
Total Amount: \$38.42

Subtotal: \$34.00, HST: \$4.42, Total Amount: \$38.42

Form1

Enter the Item's Name, Quantity and Posted Price:

☐ Show Subtotal, HST and Total Amount

Sale Type

☒ RED

☐ YELLOW

Question 2:

```
Public Class Form1 ' Ilker Hadzhalaran

    Private Sub btnExit_Click(sender As Object, e As EventArgs) Handles btnExit.Click
        Me.Close()
    End Sub

    Private Sub btnFind_Click(sender As Object, e As EventArgs) Handles btnFind.Click

        Dim intM As Integer
        Dim intN As Integer
        Dim intJ As Integer

        If isInputValid(intM, intN) = False Then
            MsgBox("m and n values must be positive integer numbers, where m is less than
n.")
            Exit Sub
        End If

        intM = CInt(txtM.Text)
        intN = CInt(txtN.Text)

        For intCounter As Integer = intM To intN

            If isPrime(intCounter, intJ) = True Then

                lstDisplayPrimeNumbers.Items.Add(intCounter)

            End If

        Next intCounter

    End Sub

    Private Function isInputValid(ByVal intM As Integer, ByVal intN As Integer)

        If Not (Integer.TryParse(txtM.Text, intM) And Integer.TryParse(txtN.Text, intN))
Then

            Return False

        ElseIf intM >= intN Then
            Return False

        ElseIf intM < 1 Or intN < 1 Then
            Return False

        Else
            Return True
        End If

    End Function

End Class
```

End Function

Private Function isPrime(intCounter As Integer, intJ As Integer)

```
    If intCounter = 2 Then
        Return True
        Exit Function
    End If
```

```
    For intJ = 2 To (intCounter - 1)
        If (intCounter Mod intJ = 0) Then
            Return False
            Exit For
        Else
            Return True
            Exit For
        End If
    Next intJ
```

End Function

Private Sub btnReset_Click(sender As Object, e As EventArgs) Handles btnReset.Click

```
    resetControls(txtM, txtN, lstDisplayPrimeNumbers)
```

End Sub

Private Sub resetControls(txtM, txtN, lstDisplayPrimeNumbers)

```
    txtM.Text = String.Empty
    txtN.Text = String.Empty
    lstDisplayPrimeNumbers.Items.Clear()
```

End Sub

End Class

Form1

Enter positive integers m and n, where m is smaller than n:

-1

1

Find Prime Numbers
Between m and n

Reset

Exit

Lab3_Question2

m and n values must be positive integer numbers, where m is less than n.

OK

Form1

Enter positive integers m and n, where m is smaller than n:

6

5

Find Prime Numbers
Between m and n

Reset

Exit

Lab3_Question2

m and n values must be positive integer numbers, where m is less than n.

OK

Form1

Enter positive integers m and n, where m is smaller than n:

1 7

2
3
5
7

Find Prime Numbers
Between m and n

Reset Exit

Form1

Enter positive integers m and n, where m is smaller than n:

Find Prime Numbers
Between m and n

Reset Exit