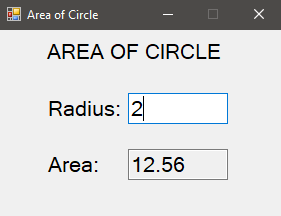
**NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_DATE:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| --- | --- | --- | --- |
| **LAB EXERCISES** | **GRADE** | **DATE** | **SIGN** |
| 1. area of circle |  |  |  |
| 1. volume of cyclinder |  |  |  |
| 1. simple interest |  |  |  |
| 1. log-in form |  |  |  |
| 1. compare 2 number |  |  |  |
| 1. compare 3 number |  |  |  |
| 1. check even or odd |  |  |  |
| 1. sum using input box |  |  |  |
| 1. coffee shop |  |  |  |
| 1. print number 1 t0 20 |  |  |  |
| 1. print number 20 to 1 |  |  |  |
| 1. print even number 1 to 20 |  |  |  |
| 1. print even number 20 to 1 |  |  |  |
| 1. print odd number 1 to 20 |  |  |  |
| 1. print odd number 20 t0 1 |  |  |  |
| 1. calculator |  |  |  |
| 1. marksheet showing grades |  |  |  |
| 1. factorial |  |  |  |
| 1. print 1 t0 30 and their sum |  |  |  |
| 1. perfect square<50 |  |  |  |
| 1. even- odd nos count |  |  |  |
| 1. linear search |  |  |  |

1. **Area of Circle**

Private Sub tbRadius\_TextChanged(sender As Object, e As EventArgs) Handles tbRadius.TextChanged

Dim pi, radius, area As Double

pi = 3.14

Try

radius = CDbl(tbRadius.Text)

area = pi \* (radius \* radius)

tbArea.Text = area

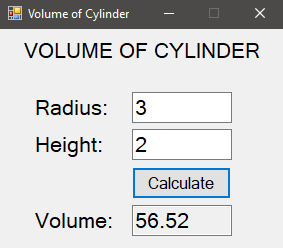
Catch ex As Exception

MessageBox.Show("Invalid Radius")

tbArea.Text = ""

End Try

1. **Volume of Cylinder**

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

Dim pi, radius, height, volume As Double

pi = 3.14

Try

radius = CDbl(tbRadius.Text)

height = CDbl(tbHeight.Text)

volume = pi \* (radius \* radius) \* height

tbVolume.Text = volume

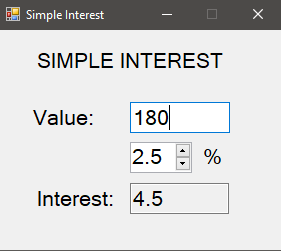
Catch ex As Exception

MessageBox.Show("Invalid Inputs")

tbVolume.Text = ""

End Try

End Sub



1. **Simple Interest**

Private Sub tbValue\_TextChanged(sender As Object, e As EventArgs) Handles tbValue.TextChanged

Dim value, percentage, interest As Double

Try

value = CDbl(tbValue.Text)

percentage = numPercentage.Value

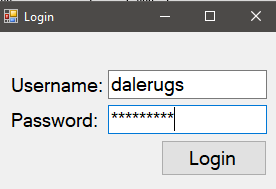
interest = value \* (percentage / 100)

tbInterest.Text = interest

Catch ex As Exception

MessageBox.Show("Invalid Value")

End Try End Sub

1. **Login Form**

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

Dim username, password As String

username = tbUsername.Text

password = tbPassword.Text

If username.Equals("") Or password.Equals("") Then

MessageBox.Show("Please enter your username or password")

ElseIf Not username.Equals("username") Or Not password.Equals("password") Then

MessageBox.Show("Incorrect username or password")

Else

Dim welcome As New Welcome

welcome.Show()

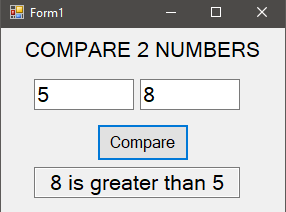
Me.Hide()

End If

tbUsername.Text = ""

tbPassword.Text = ""

End Sub

1. **Compare 2 Numbers**

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

Dim num1, num2, highest As Double

Try

num1 = CDbl(tbNum1.Text)

num2 = CDbl(tbNum2.Text)

If num1 > num2 Then

tbResult.Text = num1 & " is greater than " & num2

ElseIf num2 > num1 Then

tbResult.Text = num2 & " is greater than " & num1

Else

tbResult.Text = num1 & " & " & num2 & " are Equal"

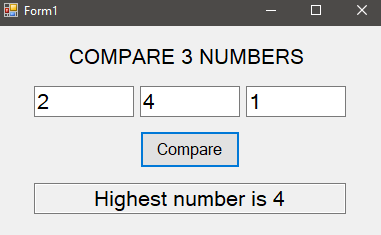
End If

Catch ex As Exception

MessageBox.Show("Invalid Inputs")

End Try

End Sub

1. **Compare 3 Numbers**

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

Dim num1, num2, num3, highestIndex As Double

Try

num1 = CDbl(tbNum1.Text)

num2 = CDbl(tbNum2.Text)

num3 = CDbl(tbNum3.Text)

Dim numbers As New ArrayList From {

num1,

num2,

num3

}

highestIndex = 0

For i As Integer = 0 To numbers.Count - 1

If numbers.Item(i) > numbers.Item(highestIndex) Then

highestIndex = i

End If

Next

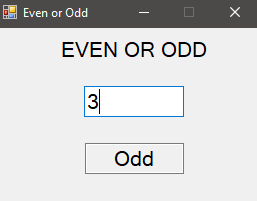
tbResult.Text = "Highest number is " & numbers.Item(highestIndex)

Catch ex As Exception

MessageBox.Show("Invalid Inputs")

End Try

End Sub



1. **Check Even or Odd**

Private Sub tbNumber\_TextChanged(sender As Object, e As EventArgs) Handles tbNumber.TextChanged

Dim number As Integer

Try

number = CInt(tbNumber.Text)

If (number Mod 2) Like 0 Then

tbResult.Text = "Even"

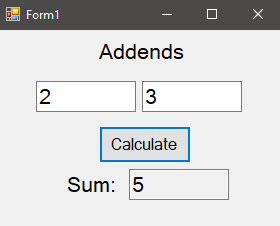
Else

tbResult.Text = "Odd"

End If

Catch ex As Exception

tbResult.Text = "Invalid" End Try End Sub

1. **Sum Using Input Box**

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

Dim addend1, addend2, sum As Double

Try

addend1 = CDbl(tbAddend1.Text)

addend2 = CDbl(tbAddend2.Text)

sum = addend1 + addend2

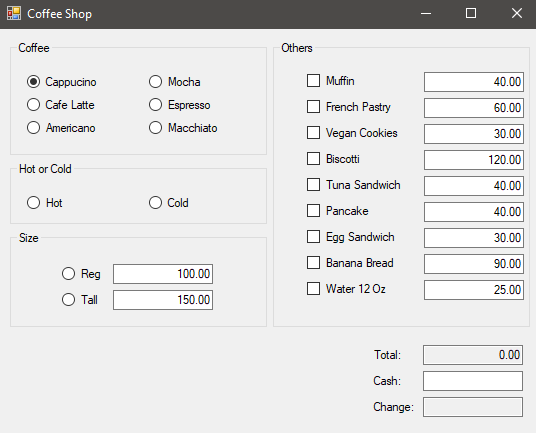
tbSum.Text = sum

Catch ex As Exception

MessageBox.Show("Invalid Inputs")

End Try

End Sub



1. **Coffee Shop**

Private Sub ComputeTotal()

Dim total As Double = 0

Dim reg, tall, muffin, frenchPastry, veganCookies, biscotti, tunaSandwich, pancake, eggSandwich,

bananaBread, water12Oz As Double

Try

reg = CDbl(tbReg.Text)

tall = CDbl(tbTall.Text)

muffin = CDbl(tbMuffin.Text)

frenchPastry = CDbl(tbFrenchPastry.Text)

veganCookies = CDbl(tbVeganCookies.Text)

biscotti = CDbl(tbBiscotti.Text)

tunaSandwich = CDbl(tbTunaSandwich.Text)

pancake = CDbl(tbPancake.Text)

eggSandwich = CDbl(tbEggSandwich.Text)

bananaBread = CDbl(tbBananaBread.Text)

water12Oz = CDbl(tbWater12Oz.Text)

If sizeReg.Checked Then

total += reg

End If

If sizeTall.Checked Then

total += tall

End If

If othersMuffin.Checked Then

total += muffin

End If

If othersFrenchPastry.Checked Then

total += frenchPastry

End If

If othersVeganCookies.Checked Then

total += veganCookies

End If

If othersBiscotti.Checked Then

total += biscotti

End If

If othersTunaSandwich.Checked Then

total += tunaSandwich

End If

If othersPancake.Checked Then

total += pancake

End If

If othersEggSandwich.Checked Then

total += eggSandwich

End If

If othersBananaBread.Checked Then

total += bananaBread

End If

If othersWater12Oz.Checked Then

total += water12Oz

End If

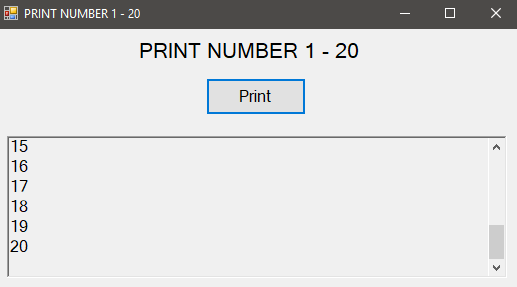
Catch ex As Exception

MessageBox.Show("Invalid Input")

End Try

tbTotal.Text = total

End Sub



1. **Print Number 1 to 20**

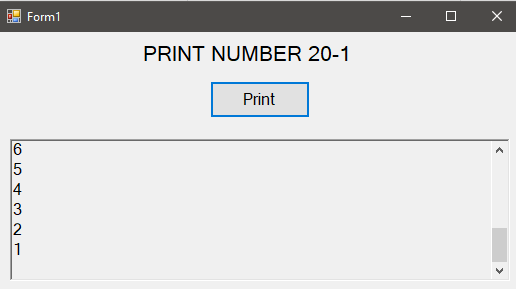
Private Sub btPrint\_Click(sender As Object, e As EventArgs) Handles btPrint.Click

For i As Integer = 1 To 20

rtbResult.Text += i & Environment.NewLine

Next

End Sub

1. **Print Number 20 to 1**

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

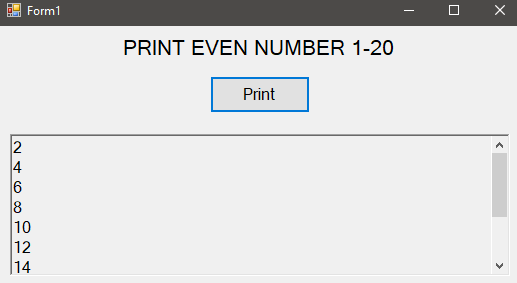
For i As Integer = 20 To 1 Step -1

rtbResult.Text += i & Environment.NewLine

Next

End Sub

1. **Print Even Number 1 to 20**

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

For i As Integer = 1 To 20

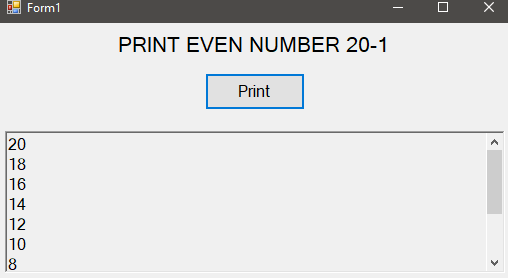
If (i Mod 2) = 0 Then

rtbResult.Text += i & Environment.NewLine

End If

Next

End Sub

1. **Print Even Number 20 to 1**

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

For i As Integer = 20 To 1 Step -1

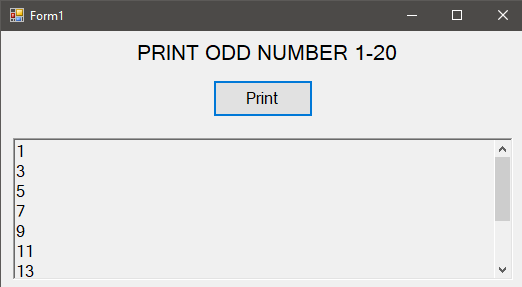
If (i Mod 2) = 0 Then

rtbResult.Text += i & Environment.NewLine

End If

Next

End Sub



1. **Print Odd Number 1 to 20**

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

For i As Integer = 1 To 20

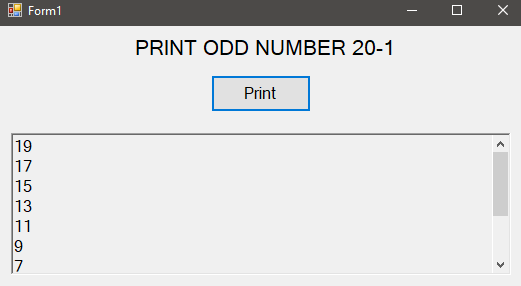
If Not (i Mod 2) = 0 Then

rtbResult.Text += i & Environment.NewLine

End If

Next

End Sub



1. **Print Odd Number 20 to 1**

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

For i As Integer = 20 To 1 Step -1

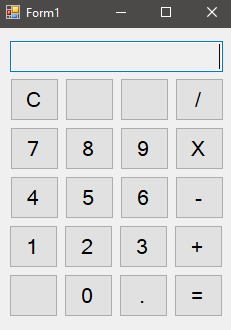
If Not (i Mod 2) = 0 Then

rtbResult.Text += i & Environment.NewLine

End If

Next

End Sub



1. **Calculator**

Dim value1 As String = ""

Dim value2 As String = ""

Dim value3 As Double = 0.0

Private Sub bt0\_Click(sender As Object, e As EventArgs) Handles bt0.Click

If tbInput.Text = value1 Then

tbInput.Text = "0."

ElseIf tbInput.Text = "0." Then

tbInput.Text = "0."

ElseIf tbInput.Text = "0" Then

tbInput.Text = "0."

ElseIf tbInput.Text = value1 Then

tbInput.Text = "0."

Else : tbInput.Text = tbInput.Text & "0"

End If

End Sub

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

value1 = ""

value2 = ""

value3 = 0.0

tbInput.Text = 0.0

End Sub

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

If tbInput.Text = "0." Then

tbInput.Text = "."

ElseIf tbInput.Text = value3 Then

tbInput.Text = "."

ElseIf tbInput.Text = value1 Then

tbInput.Text = "."

Else

If tbInput.Text.Contains(".") Then

Else

tbInput.Text = tbInput.Text & "."

End If

End If

End Sub

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

If value1 > "" And value2 = "+" Then

tbInput.Text = Val(value1) + Val(tbInput.Text)

value3 = tbInput.Text

ElseIf value2 > "" And value2 = "-" Then

tbInput.Text = Val(value1) - Val(tbInput.Text)

value3 = tbInput.Text

ElseIf value2 > "" And value2 = "X" Then

tbInput.Text = Val(value1) \* Val(tbInput.Text)

value3 = tbInput.Text

ElseIf value2 > "" And value2 = "/" Then

tbInput.Text = Val(value1) / Val(tbInput.Text)

value3 = tbInput.Text

Else

End If

End Sub

Private Sub btAdd\_Click\_1(sender As Object, e As EventArgs) Handles btSub.Click, btMul.Click, btDiv.Click, btAdd.Click

value2 = sender.text

value1 = tbInput.Text

End Sub

Private Sub bt1\_Click\_1(sender As Object, e As EventArgs) Handles bt9.Click, bt8.Click, bt7.Click, bt6.Click, bt5.Click, bt4.Click, bt3.Click, bt2.Click, bt1.Click

If tbInput.Text = value1 Then

tbInput.Text = sender.text

ElseIf tbInput.Text = "0." Then

tbInput.Text = sender.text

ElseIf tbInput.Text = value3 Then

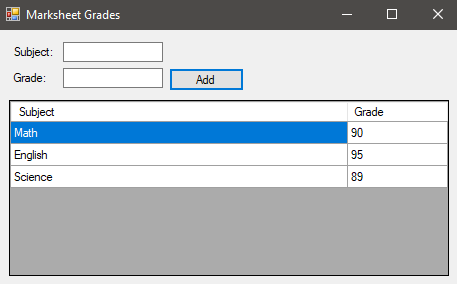
tbInput.Text = sender.text

Else

tbInput.Text = tbInput.Text & sender.text

End If

End Sub

1. **Mark sheet Showing Grades**

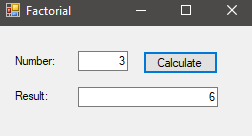
Private Sub btAdd\_Click(sender As Object, e As EventArgs) Handles btAdd.Click

dataGrade.Rows.Add(New String() {tbSubject.Text, tbGrade.Text})

tbSubject.Text = ""

tbGrade.Text = ""

End Sub

1. **Factorial**

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

Dim number, result As Double

Try

number = CDbl(tbNumber.Text)

tbResult.Text = Factorial(number)

Catch ex As Exception

MessageBox.Show("Invalid Input")

End Try

End Sub

Private Function Factorial(x As Double) As Double

If (x <= 1) Then

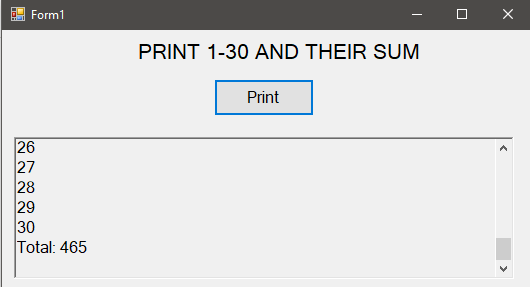
Return 1

Else

Return x \* Factorial(x - 1)

End If

End Function



1. **Print 1 to 30 and their Sum**

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

Dim total As Integer = 0

For i As Integer = 1 To 30

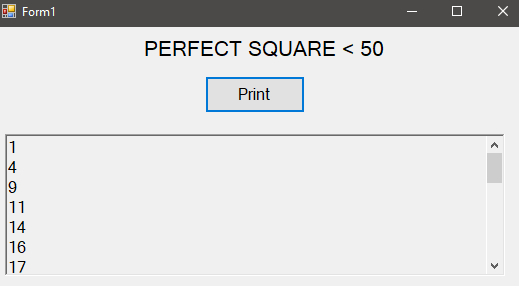
rtbResult.Text += i & Environment.NewLine

total += i

Next

rtbResult.Text += "Total: " & total & Environment.NewLine

End Sub

1. **Perfect Square < 50**

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

For i As Integer = 1 To 50

Dim sqrt As Double = Math.Sqrt(i)

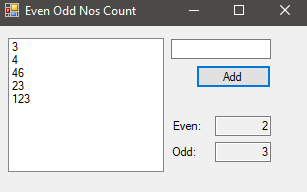
If (sqrt \* sqrt) = i Then

rtbResult.Text += i & Environment.NewLine

End If

Next

End Sub

1. **Even Odd Nos Count**

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

Dim add As Double

Try

add = CDbl(tbAdd.Text)

lbNumbers.Items.Add(add)

If (add Mod 2) = 0 Then

tbEven.Text = CInt(tbEven.Text) + 1

Else

tbOdd.Text = CInt(tbOdd.Text) + 1

End If

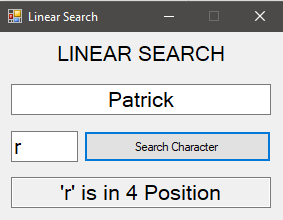
Catch ex As Exception

MessageBox.Show("Invalid Input")

End Try

tbAdd.Text = ""

End Sub



1. **Linear Search**

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

Dim inputString, inputCharacter As String

inputString = tbInput.Text

inputCharacter = tbCharacter.Text

For i As Integer = 0 To inputString.Length - 1

If inputCharacter Like inputString.Chars(i) Then

tbResult.Text = "'" & inputCharacter & "' is in " & (i + 1).ToString & " Position"

Exit For

Else tbResult.Text = "No search result" End If Next End Sub