Public Class frm\_Main

' e(x) = (x+k)Mod26

Dim cypherinput As String

Public shiftamount As Integer

Public cypheroutput As String

Dim inputlength As Integer

Dim shiftarr(1) As Integer

Dim arr(1) As String

Dim ran As Integer

Dim rd As New Random

Dim loopcount As Integer

Private Sub Form1\_Load(sender As Object, e As EventArgs) Handles MyBase.Load

MessageBox.Show("Welcome to this Caesar Cypher")

End Sub

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

cypherinput = UCase(txt\_InputWord.Text)

inputlength = txt\_InputWord.TextLength - 1

ran = rd.Next(1, 26)

Try

shiftamount = ran

Catch ex As Exception

MessageBox.Show("Invalid Input")

End Try

If shiftamount >= 26 Or shiftamount < 1 Then

MessageBox.Show("Please input a number between 1 and 25")

End If

ReDim shiftarr(inputlength)

ReDim arr(inputlength)

For i = 0 To inputlength

If txt\_InputWord.Text(i) <> " " Then

shiftarr(i) = Asc(txt\_InputWord.Text(i)) + shiftamount

arr(i) = Convert.ToChar(shiftarr(i))

ElseIf txt\_InputWord.Text(i) = " " Then

arr(i) = " "

End If

Next

For i = 0 To inputlength

cypheroutput = cypheroutput + arr(i)

Next

Form2.Show()

Me.Hide()

End Sub

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

cypherinput = UCase(txt\_InputWord.Text)

inputlength = txt\_InputWord.TextLength - 1

Try

shiftamount = txt\_CustomShift.Text

Catch ex As Exception

MessageBox.Show("Invalid Input")

End Try

If shiftamount >= 26 Or shiftamount < 1 Then

MessageBox.Show("Please input a number between 1 and 25")

End If

ReDim shiftarr(inputlength)

ReDim arr(inputlength)

For i = 0 To inputlength

If txt\_InputWord.Text(i) <> " " Then

shiftarr(i) = Asc(txt\_InputWord.Text(i)) + shiftamount

arr(i) = Convert.ToChar(shiftarr(i))

ElseIf txt\_InputWord.Text(i) = " " Then

arr(i) = " "

End If

Next

For i = 0 To inputlength

cypheroutput = cypheroutput + arr(i)

Next

Form2.Show()

Me.Hide()

End Sub

Private Sub txt\_customshift\_KeyPress(ByVal sender As System.Object, ByVal e As System.Windows.Forms.KeyPressEventArgs) Handles txt\_CustomShift.KeyPress

If Not Char.IsDigit(e.KeyChar) And Not Char.IsControl(e.KeyChar) Then

e.Handled = True

End If

End Sub

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

cypheroutput = ""

End Sub

End Class

Public Class Form2

Private Sub Form2\_Load(sender As Object, e As EventArgs) Handles MyBase.Load

lbl\_Cypheroutput.Text = frm\_Main.cypheroutput

lbl\_Shiftamount.Text = frm\_Main.shiftamount

End Sub

End Class