**Scientific Calculator using DLL**

**DLL file Code:**

Public Function powr(ByVal a As Integer, ByVal b As Integer) As Double

Dim ans As Integer

ans = 1

For i = 1 To b

ans = ans \* a

Next

powr = ans

End Function

Public Function oneby\_x(ByVal a As Double) As Double

oneby\_x = 1 / a

End Function

Public Function modd(ByVal a As Integer, ByVal b As Integer) As Double

modd = a Mod b

End Function

Public Function fact(ByVal a As Integer) As Integer

Dim f, i As Integer

f = 1

For i = 1 To a

f = f \* i

Next

fact = f

End Function

Public Function square(ByVal a As Double) As Double

square = a \* a

End Function

Public Function logg(ByVal a As Double) As Double

logg = Log(a) / Log(10)

End Function

Public Function tann(ByVal a As Double) As Double

Dim c As Double

c = a \* 3.14 / 180

tann = Tan(c)

End Function

Public Function coss(ByVal a As Double) As Double

Dim c As Double

c = a \* 3.14 / 180

coss = Cos(c)

End Function

Public Function sinn(ByVal a As Double) As Double

Dim c As Double

c = a \* 3.14 / 180

sinn = Sin(c)

End Function

Public Function root(ByVal a As Integer) As Integer

root = Sqr(a)

End Function

Public Function division(ByVal a As Double, ByVal b As Double) As Double

division = a / b

End Function

Public Function multiplication(ByVal a As Double, ByVal b As Double) As Double

multiplication = a \* b

End Function

Public Function subtraction(ByVal a As Double, ByVal b As Double) As Double

subtraction = a - b

End Function

Public Function addition(ByVal a As Double, ByVal b As Double) As Double

addition = a + b

End Function

**Standard EXE project code:**

Dim a, b, opr As Integer

Dim obj As New operations

Dim str As String

Private Sub cmd\_ON\_Click()

Text1.Text = "0"

End Sub

Private Sub cmd1\_Click()

a = Val(Text1.Text)

If (a = 0) Then

MsgBox "Divide by zero", vbInformation

Text1.Text = ""

Else

Text1.Text = obj.oneby\_x(a)

End If

End Sub

Private Sub cmdadd\_Click()

a = Val(Text1.Text)

Text1.Text = ""

opr = 1

End Sub

Private Sub cmdback\_Click()

If (Text1.Text <> "") Then

str = Text1.Text

Text1.Text = Left(str, (Len(str) - 1))

End If

End Sub

Private Sub cmdclr\_Click()

Text1.Text = "0"

End Sub

Private Sub cmdcos\_Click()

a = Val(Text1.Text)

Text1.Text = obj.coss(a)

End Sub

Private Sub cmddiv\_Click()

a = Val(Text1.Text)

Text1.Text = ""

opr = 4

End Sub

Private Sub cmdequal\_Click()

b = Val(Text1.Text)

If opr = 1 Then

Text1.Text = obj.addition(a, b)

End If

If opr = 2 Then

Text1.Text = obj.subtraction(a, b)

End If

If opr = 3 Then

Text1.Text = obj.multiplication(a, b)

End If

If opr = 4 Then

If (b = 0) Then

MsgBox "Divde by zero", vbInformation

Text1.Text = ""

Else

Text1.Text = obj.division(a, b)

End If

End If

If opr = 5 Then

Text1.Text = obj.modd(a, b)

End If

If opr = 6 Then

Text1.Text = obj.powr(a, b)

End If

End Sub

Private Sub cmdfact\_Click()

a = Val(Text1.Text)

Text1.Text = obj.fact(a)

End Sub

Private Sub cmdlog\_Click()

a = Val(Text1.Text)

Text1.Text = obj.logg(a)

End Sub

Private Sub cmdminus\_Click()

a = Val(Text1.Text)

Text1.Text = ""

opr = 2

End Sub

Private Sub cmdmod\_Click()

a = Val(Text1.Text)

Text1.Text = ""

opr = 5

End Sub

Private Sub cmdmul\_Click()

a = Val(Text1.Text)

Text1.Text = ""

opr = 3

End Sub

Private Sub cmdoff\_Click()

Text1.Text = ""

End Sub

Private Sub cmdpowr\_Click()

a = Val(Text1.Text)

opr = 6

Text1.Text = ""

End Sub

Private Sub cmdroot\_Click()

a = Val(Text1.Text)

Text1.Text = obj.root(a)

End Sub

Private Sub cmdsin\_Click()

a = Val(Text1.Text)

Text1.Text = obj.sinn(a)

End Sub

Private Sub cmdsqr\_Click()

a = Val(Text1.Text)

Text1.Text = obj.square(a)

End Sub

Private Sub cmdtan\_Click()

a = Val(Text1.Text)

Text1.Text = obj.tann(a)

End Sub

Private Sub Command1\_Click(Index As Integer)

Text1.Text = Text1.Text + Command1(Index).Caption

End Sub

Private Sub Command9\_Click()

Text1.Text = "0"

End Sub

Private Sub Command2\_Click()

Text1.Text = Text1.Text + "."

End Sub

Private Sub Form\_Load()

Text1.Text = "0"

End Sub

**Output:**



