**LISTING PROGRAM**

**\*\*\*\* Login \*\*\*\***

Public Class frmLogin

Private Sub frmLogin\_KeyPress(ByVal sender As Object, ByVal e As System.Windows.Forms.KeyPressEventArgs) Handles Me.KeyPress

If Asc(e.KeyChar) = Keys.Enter Then

SendKeys.Send("{tab}")

End If

End Sub

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

Koneksi()

End Sub

Sub cekUser()

cmd = New OdbcCommand("Select \* from tbuser where user\_id='" & txtUser.Text & "'", Conn)

rd = cmd.ExecuteReader

rd.Read()

If Not rd.HasRows Then

MsgBox("Maaf..., User Id Salah", MsgBoxStyle.Critical, "Perhatian...!")

txtUser.Text = ""

txtUser.Focus()

End If

End Sub

Sub cekPassword()

On Error Resume Next

cmd = New OdbcCommand("Select \* from tbuser where user\_Id='" & txtUser.Text & "' and password=md5('" & txtPass.Text & "')", Conn)

rd = cmd.ExecuteReader

rd.Read()

If rd.HasRows Then

Me.Visible = False

frmmenuutama.Show()

Else

MsgBox("Maaf..., Password Salah", MsgBoxStyle.Critical, "Perhatian...!")

txtPass.Text = ""

txtPass.Focus()

Exit Sub

End If

End Sub

Private Sub btnBatal\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnBatal.Click

Me.Close()

End Sub

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

If e.KeyChar = Chr(13) Then

' Call cekPassword()

Me.btnOk\_Click(sender, e)

End If

End Sub

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

If e.KeyChar = Chr(13) Then

Call cekUser()

End If

If Char.IsLetterOrDigit(e.KeyChar) = False Then

If e.KeyChar = CChar(ChrW(Keys.Back)) Or \_

e.KeyChar = CChar(ChrW(Keys.Space)) Then

e.Handled = False

Else

e.Handled = True

End If

End If

End Sub

Private Sub txtUser\_TextChanged(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles txtUser.TextChanged

txtUser.Text = StripNonAlphaNum(txtUser.Text)

End Sub

Private Sub btnOk\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnOk.Click

Call cekUser()

Call cekPassword()

End Sub

End Class

**\*\*\*\* Entry Data Pegawai\*\*\*\***

Option Strict Off

Imports System.Data.Odbc

Public Class frmPemohon

Dim valid As Boolean

Sub databaru()

txtNama.Text = ""

txtSeksi.Text = ""

txtNama.Focus()

End Sub

Sub kosongkan()

Call tidaksiapisi()

txtNip.Text = ""

txtNama.Text = ""

txtSeksi.Text = ""

txtNip.Enabled = True

txtNip.Focus()

End Sub

Sub siapisi()

txtNama.Enabled = True

txtSeksi.Enabled = True

btnEdit.Enabled = False

btnHapus.Enabled = False

btnSimpan.Enabled = True

End Sub

Sub tidaksiapisi()

txtNama.Enabled = False

txtSeksi.Enabled = False

btnSimpan.Enabled = False

btnHapus.Enabled = False

btnEdit.Enabled = False

End Sub

Sub TampilGrid()

da = New OdbcDataAdapter("Select NIP,Nama\_Pegawai,Seksi from tbPegawai where " & \_

" periode = '" & nudPeriode.Value & "' order by NIP", Conn)

ds = New DataSet

ds.Clear()

da.Fill(ds, "tbPegawai")

DGV.DataSource = (ds.Tables("tbPegawai"))

DGV.ReadOnly = True

DGV.AllowUserToAddRows = False

DGV.Columns(0).Width = 150

DGV.Columns(1).Width = 170

DGV.Columns(2).Width = 250

DGV.GridColor = Color.Blue

DGV.DefaultCellStyle.ForeColor = Color.Blue

DGV.RowHeadersDefaultCellStyle.BackColor = Color.DeepPink

DGV.AlternatingRowsDefaultCellStyle.BackColor = Color.Green

DGV.SelectionMode = DataGridViewSelectionMode.FullRowSelect

DGV.ColumnHeadersDefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

DGV.Columns(0).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

DGV.Columns(0).HeaderText = "NIP"

DGV.Columns(1).HeaderText = "Nama Pegawai"

DGV.Columns(2).HeaderText = "Seksi"

End Sub

Sub CekData()

cmd = New OdbcCommand("select \* from tbPegawai where NIP='" & txtNIP.Text & "' ", Conn)

rd = cmd.ExecuteReader

rd.Read()

If rd.HasRows = True Then

txtNama.Text = rd.Item("Nama\_Pegawai")

txtSeksi.Text = rd.Item("Seksi")

Call tidaksiapisi()

btnEdit.Enabled = True

btnHapus.Enabled = True

txtNIP.Enabled = False

Else

Call databaru()

Call siapisi()

End If

End Sub

Sub Validasi()

If txtNIP.Text = "" Then

MsgBox("NIP Belum diisi", , "Perhatian...!")

txtNIP.Focus()

valid = False

Exit Sub

Else

valid = True

End If

If txtNama.Text = "" Then

MsgBox("Nama Pegawai Belum diisi", , "Perhatian...!")

txtNama.Focus()

valid = False

Exit Sub

Else

valid = True

End If

If txtSeksi.Text = "" Then

MsgBox("Seksi Pegawai Belum diisi", , "Perhatian...!")

txtSeksi.Focus()

valid = False

Exit Sub

Else

valid = True

End If

End Sub

Private Sub btnSimpan\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnSimpan.Click

Call Validasi()

If valid = True Then

cmd = New OdbcCommand("Select \* from tbPegawai where NIP='" & txtNIP.Text & "' and " & \_

" periode = '" & nudPeriode.Value & "'", Conn)

rd = cmd.ExecuteReader

rd.Read()

If Not rd.HasRows Then

Dim sqltambah As String = "Insert into tbPegawai (periode,NIP,Nama\_Pegawai,Seksi) values " & \_

"('" & nudPeriode.Value & "','" & txtNIP.Text & "','" & txtNama.Text & "','" & txtSeksi.Text & "')"

cmd = New OdbcCommand(sqltambah, Conn)

Else

Dim sqledit As String = "Update tbPegawai set " & \_

"Nama\_Pegawai='" & txtNama.Text & "', " & \_

"Seksi='" & txtSeksi.Text & "' " & \_

" where NIP='" & txtNIP.Text & "' and periode = '" & nudPeriode.Value & "'"

cmd = New OdbcCommand(sqledit, Conn)

End If

cmd.ExecuteNonQuery()

Call TampilGrid()

Call kosongkan()

End If

End Sub

Private Sub btnEdit\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnEdit.Click

btnEdit.Enabled = False

btnHapus.Enabled = False

Call siapisi()

txtNama.Focus()

End Sub

Private Sub btnHapus\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnHapus.Click

cmd = New OdbcCommand("Select \* from tbnilaialternatif where NIP='" & txtNIP.Text & "'", Conn)

rd = cmd.ExecuteReader

rd.Read()

If rd.HasRows Then

MsgBox("Maaf, Pegawai tersebut tidak dapat di Hapus...", , "Perhatian...!")

Else

If MessageBox.Show("Yakin akan dihapus..?", "Hapus Data", MessageBoxButtons.YesNo) = Windows.Forms.DialogResult.Yes Then

cmd = New OdbcCommand("Delete from tbPegawai where NIP='" & txtNIP.Text & "' and " & \_

" periode = '" & nudPeriode.Value & "'", Conn)

cmd.ExecuteNonQuery()

End If

End If

Call TampilGrid()

Call kosongkan()

End Sub

Private Sub btnBatal\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnBatal.Click

Call kosongkan()

End Sub

Private Sub btnTutup\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnTutup.Click

Me.Dispose()

End Sub

Private Sub DGV\_CellDoubleClick(ByVal sender As Object, ByVal e As System.Windows.Forms.DataGridViewCellEventArgs) Handles DGV.CellDoubleClick

txtNIP.Text = DGV.SelectedRows.Item(0).Cells(0).Value()

Call CekData()

End Sub

Private Sub frmtbPegawai\_KeyPress(ByVal sender As Object, ByVal e As System.Windows.Forms.KeyPressEventArgs) Handles Me.KeyPress

If Asc(e.KeyChar) = Keys.Enter Then

SendKeys.Send("{tab}")

End If

End Sub

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

Call TampilGrid()

Call databaru()

Call tidaksiapisi()

Call kosongkan()

nudPeriode.Value = Year(Now)

End Sub

Private Sub txtId\_KeyPress(ByVal sender As Object, ByVal e As System.Windows.Forms.KeyPressEventArgs) Handles txtNIP.KeyPress

If e.KeyChar = Chr(13) Then

Call CekData()

End If

End Sub

Private Sub DGV\_CellContentClick(ByVal sender As System.Object, ByVal e As System.Windows.Forms.DataGridViewCellEventArgs) Handles DGV.CellContentClick

End Sub

Private Sub nudPeriode\_ValueChanged(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles nudPeriode.ValueChanged

On Error Resume Next

Call TampilGrid()

End Sub

Private Sub Label6\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Label6.Click

End Sub

Private Sub txtId\_TextChanged(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles txtNIP.TextChanged

End Sub

End Class

**\*\*\*\* Laporan Nilai Hasil Metode AHP\*\*\*\***

Option Strict Off

Imports System.Data.Odbc

Public Class frmHasilAHP

Dim jlhBulat As Integer = 2

Dim lstPegawai() As String

Dim lstAhp() As String

Dim jlhKriteria As Byte

Sub loading()

Koneksi()

dg1.Columns.Clear()

dg2.Columns.Clear()

Dim lstKriteria, lstkode\_Kriteria As New List(Of String)

Dim sql As String = "select `nama\_kriteria`,kode\_kriteria from `tbkriteria` order by `kode\_kriteria` asc"

Dim cmd As New OdbcCommand(sql, Conn)

Dim rd As OdbcDataReader = cmd.ExecuteReader

While rd.Read

dg1.Columns.Add(rd(0), rd(0))

lstKriteria.Add(rd(0))

lstkode\_Kriteria.Add(rd(1))

End While

jlhKriteria = lstkode\_Kriteria.Count

rd.Close()

dg1.Columns.Add("total", "Total")

sql = "select NIP,Nama\_Pegawai from `tbPegawai` where periode = '" & nudPeriode.Value & "' order by `NIP` asc"

Dim lstcNik As New List(Of String)

cmd = New OdbcCommand(sql, Conn)

rd = cmd.ExecuteReader

Dim i As Integer = 0

While rd.Read

dg1.Rows.Add()

dg1.Rows(i).HeaderCell.Value = rd(1)

lstcNIP.Add(rd(0))

i += 1

End While

rd.Close()

Dim lstM1 As New List(Of String())

Dim lstM2 As New List(Of String())

Dim lstM3 As New List(Of String())

lstPegawai = lstcNik.ToArray

For alternatif As Integer = 0 To dg1.Rows.Count - 2

For kriteria As Integer = 0 To dg1.Columns.Count - 2

Dim M1() As String = {kriteria, alternatif, getPenilaianAlternatif2(lstcNIP(alternatif), lstkode\_Kriteria(kriteria))}

lstM1.Add(M1)

Dim M2() As String = {kriteria, alternatif, Format(getHasilAhp("all", lstkode\_Kriteria(kriteria)), "0.00") & "\*" & Format(getHasilAhp(lstkode\_Kriteria(kriteria), getPenilaianAlternatif(lstcNIP(alternatif), lstkode\_Kriteria(kriteria))), "0.00")}

lstM2.Add(M2)

Dim M3() As String = {kriteria, alternatif, Format(Math.Round(getHasilAhp("all", lstkode\_Kriteria(kriteria)) \* getHasilAhp(lstkode\_Kriteria(kriteria), getPenilaianAlternatif(lstcNIP(alternatif), lstkode\_Kriteria(kriteria))), jlhBulat), "0.00")}

lstM3.Add(M3)

' dg1.Item(kriteria, alternatif).Value = Format(Math.Round(getHasilAhp("all", lstKriteria(kriteria)) \* getHasilAhp(lstKriteria(kriteria), getPenilaianAlternatif(lstcNIP(alternatif), lstKriteria(kriteria))), jlhBulat), "0.000")

dg1.Item(kriteria, alternatif).Value = Math.Round(getHasilAhp("all", lstkode\_Kriteria(kriteria)) \* getHasilAhp(lstkode\_Kriteria(kriteria), getPenilaianAlternatif(lstcNIP(alternatif), lstkode\_Kriteria(kriteria))), jlhBulat)

Next

Next

Dim lstTotal As New List(Of String)

' Dim lstAlt As New List(Of String)

For total As Integer = 0 To dg1.Rows.Count - 2

Dim jlhTotal As Double = 0

For kriteria As Integer = 0 To dg1.Columns.Count - 2

jlhTotal += Val(dg1.Item(kriteria, total).Value)

Next

Dim M1() As String = {dg1.Columns.Count - 1, total, ""}

Dim M3() As String = {dg1.Columns.Count - 1, total, Format(Math.Round(jlhTotal, jlhBulat), "0.00")}

' Dim M3() As String = {dg1.Columns.Count - 1, total, Math.Round(jlhTotal, jlhBulat)}

lstM1.Add(M1)

lstM2.Add(M1)

lstM3.Add(M3)

dg1.Item(dg1.Columns.Count - 1, total).Value = Format(Math.Round(jlhTotal, jlhBulat), "0.00")

'dg1.Item(dg1.Columns.Count - 1, total).Value = Math.Round(jlhTotal, jlhBulat)

lstTotal.Add(Format(Math.Round(jlhTotal, jlhBulat), "0.00"))

' lstAlt.Add(dg1.Item(total, 0).Value)

Next

Matriks1 = lstM1.ToArray

Matriks2 = lstM2.ToArray

Matriks3 = lstM3.ToArray

steps = 3

' dg2.Columns.Clear()

' dg2.Columns.Add("", "Rangking Alternatif")

lstAhp = lstTotal.ToArray

lstTotal.Sort()

End Sub

Dim steps As Integer = 0

Dim Matriks1()() As String

Dim Matriks2()() As String

Dim Matriks3()() As String

Function getPenilaianAlternatif(ByVal cNik As String, ByVal kriteria As String) As String

Dim sql As String = "Select `kode\_sub` from `tbnilaialternatif` " & \_

"where periode = '" & nudPeriode.Value & "' and NIP='" & cNIP & "' and kode\_kriteria='" & kriteria & "'"

Dim cmd As New OdbcCommand(sql, Conn)

Dim rd As OdbcDataReader = cmd.ExecuteReader

Dim strPenilaian As String = ""

Dim strPenilaianSub As String = ""

While rd.Read

strPenilaian = rd(0)

End While

rd.Close()

Return strPenilaian

End Function

Function getPenilaianAlternatif2(ByVal cNik As String, ByVal kriteria As String) As String

Dim sql As String = "select A.sub\_kriteria from tbsub\_kriteria A,`tbnilaialternatif` B " & \_

"where A.Kode\_sub=B.Kode\_Sub and b.`NIP`='" & cNik & "' and b.`kode\_kriteria`='" & kriteria & "'"

Dim cmd As New OdbcCommand(sql, Conn)

Dim rd As OdbcDataReader = cmd.ExecuteReader

Dim strPenilaian As String = ""

Dim strPenilaianSub As String = ""

While rd.Read

strPenilaianSub = rd(0)

End While

rd.Close()

Return strPenilaianSub

End Function

Function getHasilAhp(ByVal kriteria As String, ByVal subkriteria As String) As Double

Dim sql As String = "select `hasil` from `tbprioritas` where `kode\_kriteria`='" & kriteria & "' and `kode\_sub`='" & subkriteria & "'"

Dim cmd As New OdbcCommand(sql, Conn)

Dim rd As OdbcDataReader = cmd.ExecuteReader

Dim nilaiAhp As Double = 0

While rd.Read

nilaiAhp = Val(rd(0))

End While

rd.Close()

Return nilaiAhp

End Function

Private Sub btnSimpan\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)

End Sub

Sub SimpanHasil()

Dim cKet As String

If steps = 3 Then

Dim sql As String = "delete from `tbhasil` where periode = '" & nudPeriode.Value & "'"

Dim cmd As New OdbcCommand(sql, Conn)

cmd.ExecuteNonQuery()

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

cmd = New OdbcCommand("select \* from tbnilaialternatif where NIP='" & lstPegawai(i) & "' " & \_

"and ket = 'Tidak Layak'", Conn)

rd2 = cmd.ExecuteReader

rd2.Read()

If rd2.HasRows = True Then

cKet = "Tidak Layak"

Else

cKet = "Layak"

End If

rd2.Close()

sql = "insert into `tbhasil` values('" & nudPeriode.Value & "','" & lstPegawai(i) & "','" & lstAhp(i) & "','" & cKet & "')"

cmd = New OdbcCommand(sql, Conn)

cmd.ExecuteNonQuery()

Next

MsgBox("Data Tersimpan")

Else

MsgBox("Tampilan Hasil AHP diatas, tidak dapat disimpan")

End If

Call TampilHasil()

End Sub

Private Sub btnNext\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnNext.Click

If steps < 3 Then

steps += 1

Select Case steps

Case 2

setDG(Matriks2)

Case 3

setDG(Matriks3)

End Select

End If

End Sub

Private Sub btnPrev\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnPrev.Click

If steps > 1 Then

steps -= 1

Select Case steps

Case 1

setDG(Matriks1)

Case 2

setDG(Matriks2)

End Select

End If

End Sub

Sub setDG(ByVal M As String()())

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

Dim column As Integer = Integer.Parse(M(i)(0))

Dim rows As Integer = Integer.Parse(M(i)(1))

Dim value As String = M(i)(2)

dg1.Item(column, rows).Value = value

Next

End Sub

Private Sub btnHitung\_Click\_1(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnHitung.Click

Call loading()

Call SimpanHasil()

Call AturGrid1()

End Sub

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

nudPeriode.Value = Year(Now)

Call loading()

Call AturGrid1()

' Call TampilHasil()

End Sub

Private Sub btnTutup\_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnTutup.Click

Me.Dispose()

End Sub

Private Sub TabControl1\_Click(ByVal sender As Object, ByVal e As System.EventArgs) Handles TabControl1.Click

' Call TampilHasil()

End Sub

Sub TampilHasil()

da = New OdbcDataAdapter("Select A.NIP,B.Nama\_Pegawai,B.Seksi,A.Hasil,A.Ket from tbhasil A, tbPegawai B where " & \_

" a.periode = '" & nudPeriode.Value & "' and a.NIP=b.NIP order by Ket,hasil Desc", Conn)

ds = New DataSet

ds.Clear()

da.Fill(ds, "tbPegawai")

dg2.DataSource = (ds.Tables("tbPegawai"))

dg2.ReadOnly = True

dg2.AllowUserToAddRows = False

dg2.Columns(0).Width = 100

dg2.Columns(1).Width = 180

dg2.Columns(2).Width = 120

dg2.Columns(3).Width = 80

dg2.GridColor = Color.Blue

dg2.DefaultCellStyle.ForeColor = Color.Blue

dg2.RowHeadersDefaultCellStyle.BackColor = Color.DeepPink

dg2.AlternatingRowsDefaultCellStyle.BackColor = Color.Yellow

dg2.SelectionMode = DataGridViewSelectionMode.FullRowSelect

dg2.ColumnHeadersDefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

dg2.Columns(0).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

dg2.Columns(3).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

dg2.Columns(3).DefaultCellStyle.Format = "0.00"

dg2.Columns(0).HeaderText = "NIP"

dg2.Columns(1).HeaderText = "Nama Pegawai"

dg2.Columns(2).HeaderText = "Seksi"

dg2.Columns(3).HeaderText = "Hasil"

End Sub

Sub AturGrid1()

dg1.ReadOnly = True

dg1.GridColor = Color.Blue

dg1.DefaultCellStyle.ForeColor = Color.Blue

dg1.RowHeadersDefaultCellStyle.BackColor = Color.DeepPink

dg1.AlternatingRowsDefaultCellStyle.BackColor = Color.Yellow

dg1.SelectionMode = DataGridViewSelectionMode.FullRowSelect

dg1.ColumnHeadersDefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

dg1.Columns(0).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

For k As Integer = 0 To jlhKriteria

dg1.Columns(k).DefaultCellStyle.Format = "0.00"

dg1.Columns(k).DefaultCellStyle.Alignment = DataGridViewContentAlignment.MiddleCenter

Next

End Sub

Private Sub nudPeriode\_ValueChanged(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles nudPeriode.ValueChanged

Call loading()

Call AturGrid1()

'Call TampilHasil()

End Sub

Private Sub TabControl1\_Selected(ByVal sender As Object, ByVal e As System.Windows.Forms.TabControlEventArgs) Handles TabControl1.Selected

If TabControl1.SelectedIndex = 1 Then

Call TampilHasil()

Panel2.Visible = False

Else

Panel2.Visible = True

End If

End Sub

End Class

End Sub