

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

frmmenuutama2.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 Pemohon ******

```

Option Strict Off
Imports System.Data.Odbc
Public Class frmPemohon
    Dim valid As Boolean
    Sub databaru()
        txtNama.Text = ""
        txtAlamat.Text = ""
        txtNama.Focus()
    End Sub
    Sub kosongkan()

```

```

        Call tidaksiapisi()
        txtNik.Text = ""
        txtNama.Text = ""
        txtAlamat.Text = ""
        txtNik.Enabled = True
        txtNik.Focus()
    End Sub
    Sub siapisi()
        txtNama.Enabled = True
        txtAlamat.Enabled = True
        btnEdit.Enabled = False
        btnHapus.Enabled = False
        btnSimpan.Enabled = True
    End Sub
    Sub tidaksiapisi()
        txtNama.Enabled = False
        txtAlamat.Enabled = False
        btnSimpan.Enabled = False
        btnHapus.Enabled = False
        btnEdit.Enabled = False
    End Sub
    Sub TampilGrid()
        da = New OdbcDataAdapter("Select nik_kk,nama_kelompok,alamat from
tbPemohon where " & _
        " periode = " & nudPeriode.Value & " order by nik_kk", Conn)
        ds = New DataSet
        ds.Clear()
        da.Fill(ds, "tbPemohon")
        DGV.DataSource = (ds.Tables("tbPemohon"))
        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 = "NIK KK"
        DGV.Columns(1).HeaderText = "Nama Kelompok"
        DGV.Columns(2).HeaderText = "Alamat"

    End Sub

```

```

Sub CekData()
    cmd = New OdbcCommand("select * from tbPemohon where nik_kk=" &
txtNik.Text & " ", Conn)
    rd = cmd.ExecuteReader
    rd.Read()
    If rd.HasRows = True Then
        txtNama.Text = rd.Item("nama_kelompok")
        txtAlamat.Text = rd.Item("alamat")
        Call tidaksiapisi()
        btnEdit.Enabled = True
        btnHapus.Enabled = True
        txtNik.Enabled = False

    Else
        Call databaru()
        Call siapisi()

    End If
End Sub
Sub Validasi()
    If txtNik.Text = "" Then
        MsgBox("NIK Belum diisi", , "Perhatian...!")
        txtNik.Focus()
        valid = False
        Exit Sub
    Else
        valid = True
    End If
    If txtNama.Text = "" Then
        MsgBox("Nama Kelompok Belum diisi", , "Perhatian...!")
        txtNama.Focus()
        valid = False
        Exit Sub
    Else
        valid = True
    End If
    If txtAlamat.Text = "" Then
        MsgBox("Alamat Pemohon Belum diisi", , "Perhatian...!")
        txtAlamat.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 tbPemohon where nik_kk=" &
txtNik.Text & " and " & _
            " periode = " & nudPeriode.Value & "", Conn)
        rd = cmd.ExecuteReader
        rd.Read()
        If Not rd.HasRows Then
            Dim sqltambah As String = "Insert into tbPemohon
(periode,nik_kk,nama_kelompok,alamat) values " & _
            "(" & nudPeriode.Value & "," & txtNik.Text & "," & txtNama.Text & "," &
txtAlamat.Text & ")"
            cmd = New OdbcCommand(sqltambah, Conn)

        Else
            Dim sqledit As String = "Update tbPemohon set " & _
            "nama_kelompok=" & txtNama.Text & " , " & _
            "alamat=" & txtAlamat.Text & " " & _
            " where nik_kk=" & txtNik.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 nik_kk=" &
txtNik.Text & "", Conn)
    rd = cmd.ExecuteReader
    rd.Read()
    If rd.HasRows Then
        MsgBox("Maaf, Pemohon 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 tbPemohon where nik_kk=" &
txtNik.Text & " and " & _
                " periode = " & nudPeriode.Value & "", Conn)
            cmd.ExecuteNonQuery()
        End If
    End If
End Sub

```

```

        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

    txtNik.Text = DGV.SelectedRows.Item(0).Cells(0).Value()
    Call CekData()
End Sub

Private Sub frmtbPemohon_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 frmtbPemohon_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 txtNik.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 txtNik.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 lstPemohon() 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 nik_kk,nama_kelompok from `tbpemohon` where periode = '" &
nudPeriode.Value & "' order by `nik_kk` 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)
    lstcNik.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())
lstPemohon = 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(lstcNik(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(lstcNik(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(lstcNik(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(lstcNik(alternatif), lstKriteria(kriteria))), jlhBulat, "0.000")
        dg1.Item(kriteria, alternatif).Value = Math.Round(getHasilAhp("all",
lstkode_Kriteria(kriteria)) * getHasilAhp(lstkode_Kriteria(kriteria),
getPenilaianAlternatif(lstcNik(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 nik_kk=" & cNik & " 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.`nik_kk`=" & 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 lstPemohon.Length - 1
                    cmd = New OdbcCommand("select * from tbnilaialternatif where nik_kk=" &
lstPemohon(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 & "','" &
lstPemohon(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.nik_kk,B.nama_kelompok,B.alamat,A.Hasil,A.Ket from tbhasil A, tbPemohon B
where " & _
        " a.periode = " & nudPeriode.Value & " and a.nik_kk=b.nik_kk
order by Ket,hasil Desc", Conn)
    ds = New DataSet
    ds.Clear()
    da.Fill(ds, "tbPemohon")
    dg2.DataSource = (ds.Tables("tbPemohon"))
    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 = "NIK"
        dg2.Columns(1).HeaderText = "Nama Kelompok"
        dg2.Columns(2).HeaderText = "Alamat"
        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

```