

Edition 2021



**VB.NET**

Basic  
**Pemograman  
Visual**

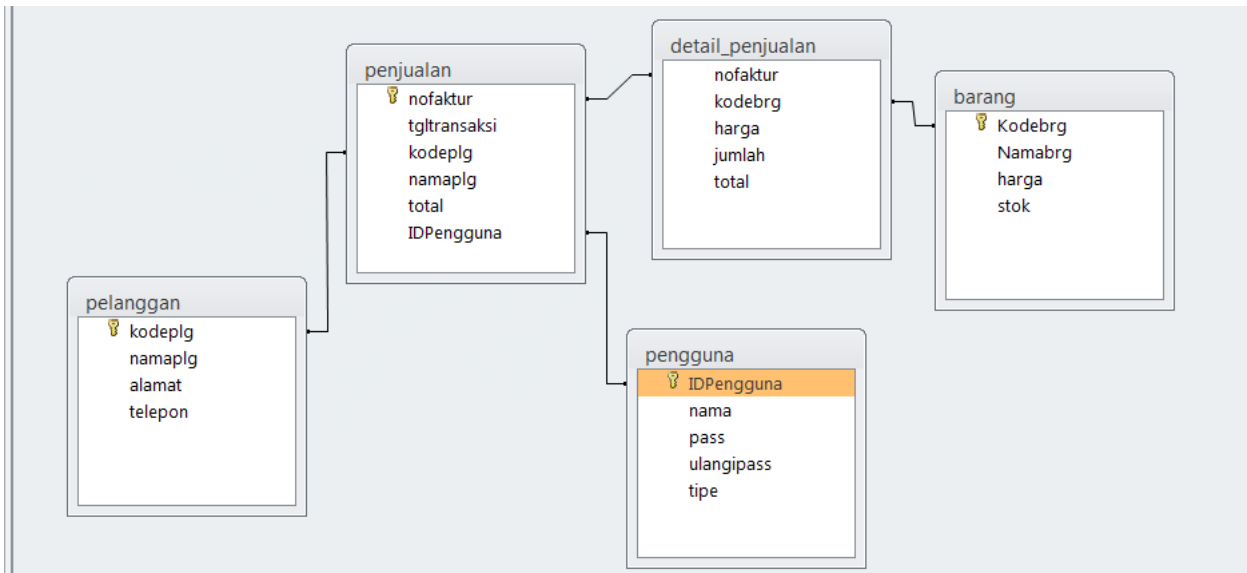
**Aririk Japik, S.Kom**

*Belajar Program Dengan Visual Basic. Net*

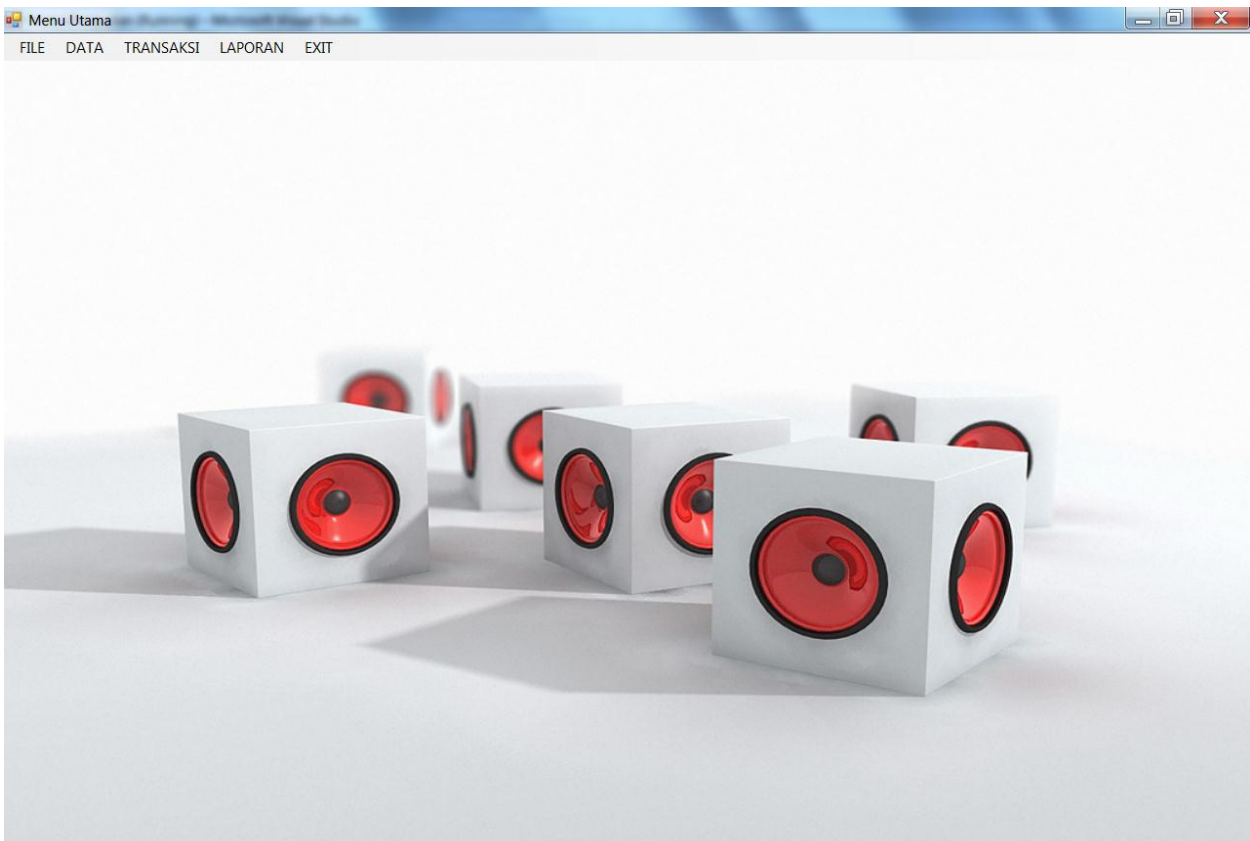
Modul Visual Basic Net.

## Relational Tabel

Adalah hubungan antara tabel yang mempresentasikan hubungan antar objek di dunia nyata. Relasi merupakan hubungan yang terjadi pada suatu tabel dengan lainnya yang mempresentasikan hubungan antar objek di dunia nyata dan berfungsi untuk mengatur mengatur operasi suatu database.



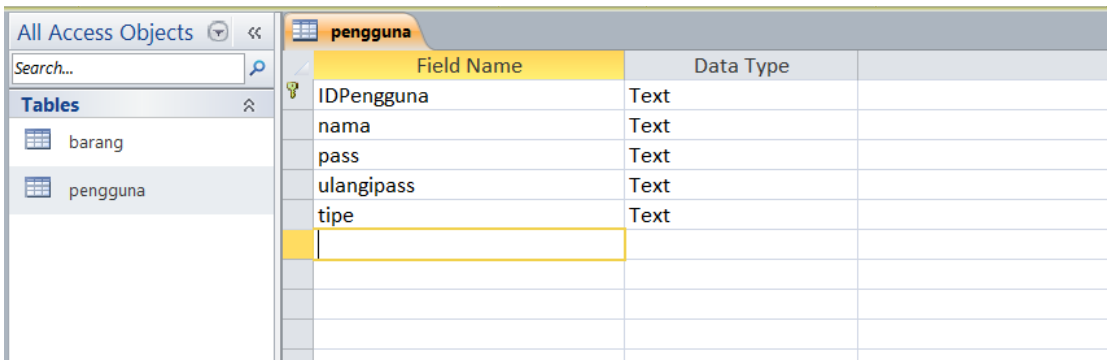
### 1. Menu Utama



Gunakan **menu strip** pada toolbox untuk membuat menu utama. Menu utama terdiri dari menu **File, Data, Transaksi, Laporan dan Exit.**

## 1. Buat database (dbpenjualan)

Nama table : Pengguna



Field Name	Data Type
IDPengguna	Text
nama	Text
pass	Text
ulangipass	Text
tipe	Text

### → Membuat modul

- Klik project pilih add module
- Lalu ketikkan kode untuk menghubungkan ke database

```
Imports System.Data.OleDb
```

```
Module Module1
```

```
Public CONN As OleDbConnection
```

```
Public DA As OleDbDataAdapter
```

```
Public DS As DataSet
```

```
Public CMD As OleDbCommand
```

```
Public RD As OleDbDataReader
```

```
Public LokasiDB As String
```

```
Public Sub Koneksi()
```

```
LokasiDB = ("provider=microsoft.jet.oledb.4.0;data source=dbpenjualan.mdb")
```

```
CONN = New OleDbConnection(LokasiDB)
```

```
If CONN.State = ConnectionState.Closed Then
```

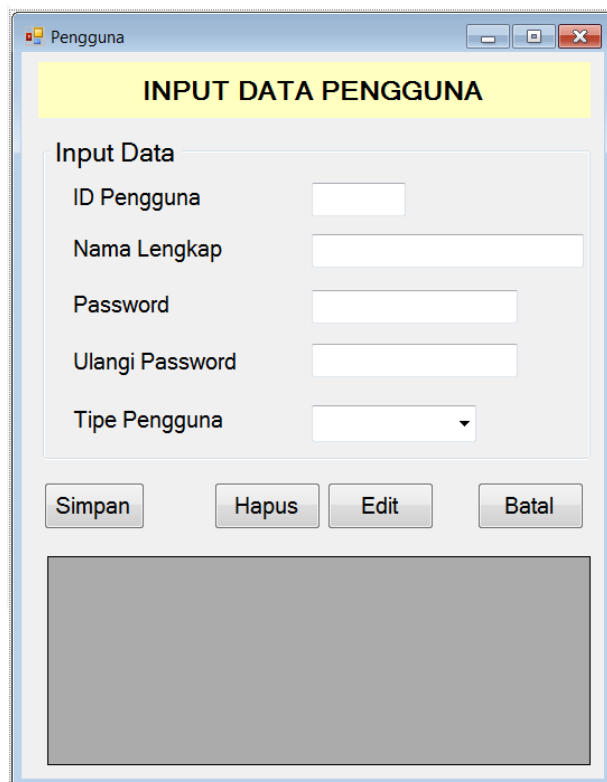
```
CONN.Open()
```

```
End If
```

```
End Sub
```

```
End Module
```

### → Rancanglah Form Pengguna



## ➔ Kode Input Pengguna

```
Imports System.Data.OleDb
```

```
Public Class Pengguna
```

```
Sub Tipe()
```

```
    cbotipe.Items.Add("Admin")
```

```
    cbotipe.Items.Add("Operator")
```

```
End Sub
```

```
Private Sub Pengguna_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load
```

```
    Call Koneksi()
```

```
    Call Tipe()
```

```
    'Buat sub tampilkan dahulu
```

```
    Call Tampilkan()
```

```
    Call Judul()
```

```
End Sub
```

```
Sub Tampilkan()
```

```
    DA = New OleDbDataAdapter("Select * from Pengguna", CONN)
```

```
    DS = New DataSet
```

```
    DS.Clear()
```

```
    DA.Fill(DS, "Pengguna")
```

```
    DGVPengguna.DataSource = (DS.Tables("Pengguna"))
```

```
    DGVPengguna.ReadOnly = True
```

```
End Sub
```

```
Sub Judul()
```

```
    'membuat header dgv
```

```
    Me.DGVPengguna.Columns(0).HeaderText = "ID Pengguna"
```

```
    Me.DGVPengguna.Columns(1).HeaderText = "Nama Pengguna"
```

```
    Me.DGVPengguna.Columns(2).HeaderText = "Password"
```

```
    Me.DGVPengguna.Columns(3).HeaderText = "Ulangi Password"
```

```
    Me.DGVPengguna.Columns(4).HeaderText = "Tipe"
```

```
    'melebarkan kolom dgv
```

```
    Me.DGVPengguna.Columns(0).Width = 120
```

```
    Me.DGVPengguna.Columns(1).Width = 150
```

```
    Me.DGVPengguna.Columns(2).Width = 100
```

```
    Me.DGVPengguna.Columns(3).Width = 100
```

```
    Me.DGVPengguna.Columns(4).Width = 80
```

```
End Sub
```

```
Sub kosongkan()
```

```
    txtidpengguna.Text = ""
```

```
    txtnama.Text = ""
```

```
    txtpassword.Text = ""
```

```
    txtulangipassword.Text = ""
```

```
    cbotipe.Text = ""
```

```
End Sub
```

```
Private Sub cmdsimpan_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles cmdsimpan.Click
```

```
    If txtidpengguna.Text = "" Or txtnama.Text = "" Or txtpassword.Text = "" Or txtulangipassword.Text = "" Then
```

```
        MsgBox("Data Belum Lengkap", MsgBoxStyle.Exclamation, "Warning")
```

```
        Exit Sub
```

```
    Else
```

```
        CMD = New OleDbCommand("Select * from pengguna where
```

```
IDPengguna=' & txtidpengguna.Text & "'", CONN)
```

```
        RD = CMD.ExecuteReader
```

```
        RD.Read()
```

```

        If Not RD.HasRows Then

            Dim sqlsimpan As String = "Insert into
pengguna(IDpengguna,nama,pass,ulangipass,tipe) values " & _
            "(" & txtidpengguna.Text & "','" & txtnama.Text & "','" &
txtpassword.Text & "','" & txtulangipassword.Text & "','" & cbotipe.Text &
            "'"")

            CMD = New OleDbCommand(sqlsimpan, CONN)
            CMD.ExecuteNonQuery()
            MsgBox("Data Pengguna Telah Disimpan",
MsgBoxStyle.Information, "Pesan")

            Call kosongkan()
            Call Tampilkan()
            cmdsimpan.Enabled = True
        Else
            MsgBox("ID Pengguna Sudah Ada", MsgBoxStyle.Exclamation,
"Pesan")
            txtidpengguna.Text = ""
        End If
    End If
End Sub

Private Sub DGVPengguna_CellMouseDoubleClick(ByVal sender As Object,
ByVal e As System.Windows.Forms.DataGridViewCellEventArgs) Handles
DGVPengguna_CellMouseDoubleClick
    On Error Resume Next
    Dim baris As Integer
    With DGVPengguna
        baris = .CurrentRow.Index
        txtidpengguna.Text = .Item(0, baris).Value
        txtnama.Text = .Item(1, baris).Value
        txtpassword.Text = .Item(2, baris).Value
        txtulangipassword.Text = .Item(3, baris).Value
        cbotipe.Text = .Item(4, baris).Value
    End With
End Sub

Private Sub cmdhapus_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles cmdhapus.Click
    If txtidpengguna.Text = "" Then
        MsgBox("Isi Kode Pengguna terlebih dahulu")
        txtidpengguna.Focus()
        Exit Sub
    Else
        If MessageBox.Show("Yakin ID Pengguna : " & txtidpengguna.Text &
" akan dihapus..?", "", MessageBoxButtons.YesNo, MessageBoxIcon.Exclamation)
= Windows.Forms.DialogResult.Yes Then
            CMD = New OleDbCommand("Delete * from Pengguna where
IDPengguna='" & txtidpengguna.Text & "'", CONN)
            CMD.ExecuteNonQuery()
            Call kosongkan()
            Call Tampilkan()
        Else
            Call kosongkan()
        End If
    End If
End Sub

```

```

Private Sub cmdedit_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles cmdedit.Click
    If txtidpengguna.Text = "" Then
        MsgBox("Data yang diedit belum ada", MsgBoxStyle.Exclamation,
"warning")
    Else
        Dim sqledit As String = "Update Pengguna set " & _
            "nama='" & txtnama.Text & "', " & _
            "Pass='" & txtpassword.Text & "', " & _
            "ulangipass='" & txtulangipassword.Text & "', " & _
            "tipe='" & cbotipe.Text & "' " & _
            "where IDPengguna='" & txtidpengguna.Text & "'"
        CMD = New OleDbCommand(sqledit, CONN)
        CMD.ExecuteNonQuery()
        MsgBox("Data Pengguna Berhasil DiEdit", MsgBoxStyle.Information,
"Sukses")
        Call kosongkan()
        Call Tampilkan()
    End If
End Sub

Private Sub cmdKeluar_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles cmdKeluar.Click
    If cmdKeluar.Text = "Batal" Then
        Call kosongkan()
        cmdKeluar.Text = "Keluar"
    ElseIf cmdKeluar.Text = "Keluar" Then
        cmdKeluar.Text = "Keluar"
        Close()
    End If
End Sub
End Class

```

## ➔ Login sistem.

```

Imports System.Data.OleDb
Public Class Login
    Sub tipe()
        cbotipe.Items.Add("Admin")
        cbotipe.Items.Add("Operator")
    End Sub

```



```

Private Sub Login_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
    Call Koneksi()
    Call tipe()
End Sub

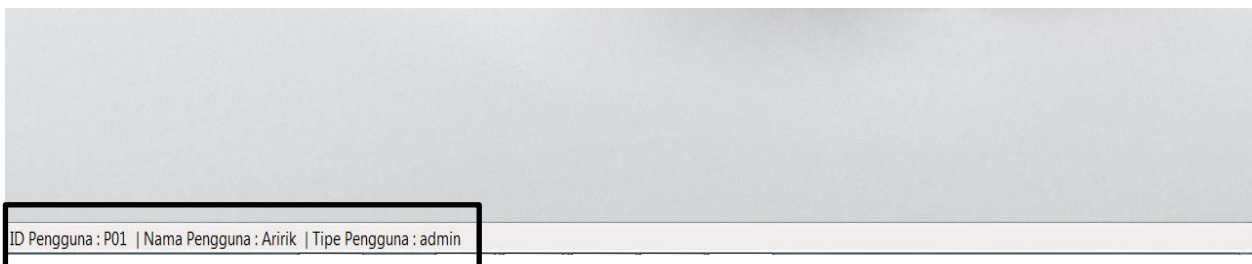
Private Sub txtIDPengguna_KeyPress(ByVal sender As Object, ByVal e As
System.Windows.Forms.KeyPressEventArgs) Handles txtIDPengguna.KeyPress
    If e.KeyChar = Chr(13) Then
        txtpassword.Focus()
    End If
End Sub

Private Sub cmdlogin_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles cmdlogin.Click
    CMD = New OleDbCommand("select * from Pengguna where IDPengguna='" &
txtIDPengguna.Text & "'" and Pass='" & txtpassword.Text & "'" and tipe='" &
cbotipe.Text & "'", CONN)
    RD = CMD.ExecuteReader
    RD.Read()
    If RD.HasRows Then
        Me.Visible = False
        MsgBox("IDPengguna dan Password Benar", MsgBoxStyle.Information,
"Login")
        MenuUtama.Show()
        MenuUtama.Panel1.Text = "ID Pengguna : " & RD.GetString(0)
        MenuUtama.Panel2.Text = "| Nama Pengguna : " & RD.GetString(1)
        MenuUtama.Panel3.Text = "| Tipe Pengguna : " & RD.GetString(3)
    Else
        MsgBox("IDPengguna dan Password Salah", MsgBoxStyle.Critical,
"Salah")
        txtIDPengguna.Clear()
        txtpassword.Clear()
        txtIDPengguna.Focus()
    End If
End Sub

```



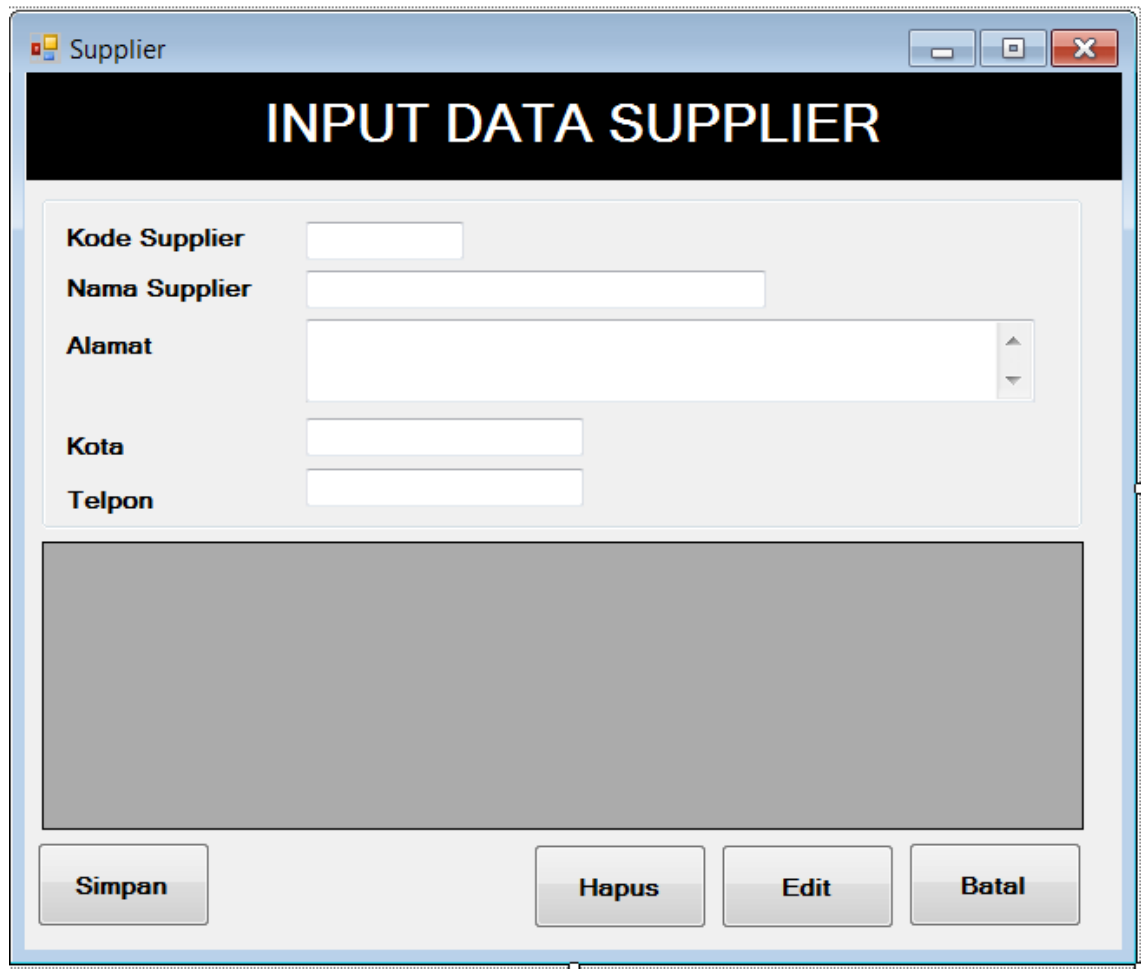
Tambahkan **statusstrip** dan beri nama **panel1**, **Panel2**, dan **panel3**



⇒ Berikan hak akses untuk masing-masing tipe pengguna.

## MID SEMESTER VB.Net. SEM.3

- ⇒ Kerjakan Untuk input data Supplier
- ⇒ Buat form baru dengan nama **supplier.vb**



The image shows a screenshot of a Windows application window titled "Supplier". The window has a standard Windows title bar with minimize, maximize, and close buttons. Below the title bar is a black header bar with the text "INPUT DATA SUPPLIER" in white. The main content area is a light gray form with the following fields:

- Kode Supplier**: A small text input field.
- Nama Supplier**: A medium-length text input field.
- Alamat**: A large text input field with a vertical scrollbar on the right.
- Kota**: A small text input field.
- Telpon**: A small text input field.

Below the form is a large, empty gray rectangular area. At the bottom of the window, there are four buttons: "Simpan", "Hapus", "Edit", and "Batal".

- ⇒ Buatlah nama table : **supplier** dan serta rancanglah field sesuai dengan rancangan input form.
- ⇒ Data dapat disimpan, dihapus, dan diedit serta dapat ditampilkan pada **DGVSupplier**



# Transaksi Penjualan

**FORM TRANSAKSI PENJUALAN**

No. Faktur

Tanggal Penjualan 04 April 2021

Kode Pelanggan

Nama Pelanggan

Kode Barang

Nama Barang

Harga

Jumlah  Stok

Total

Tabel Temp\_penjualan

Field Name	Data Type
kode_barang	Text
nama_barang	Text
harga	Number
jumlah	Number
total	Number

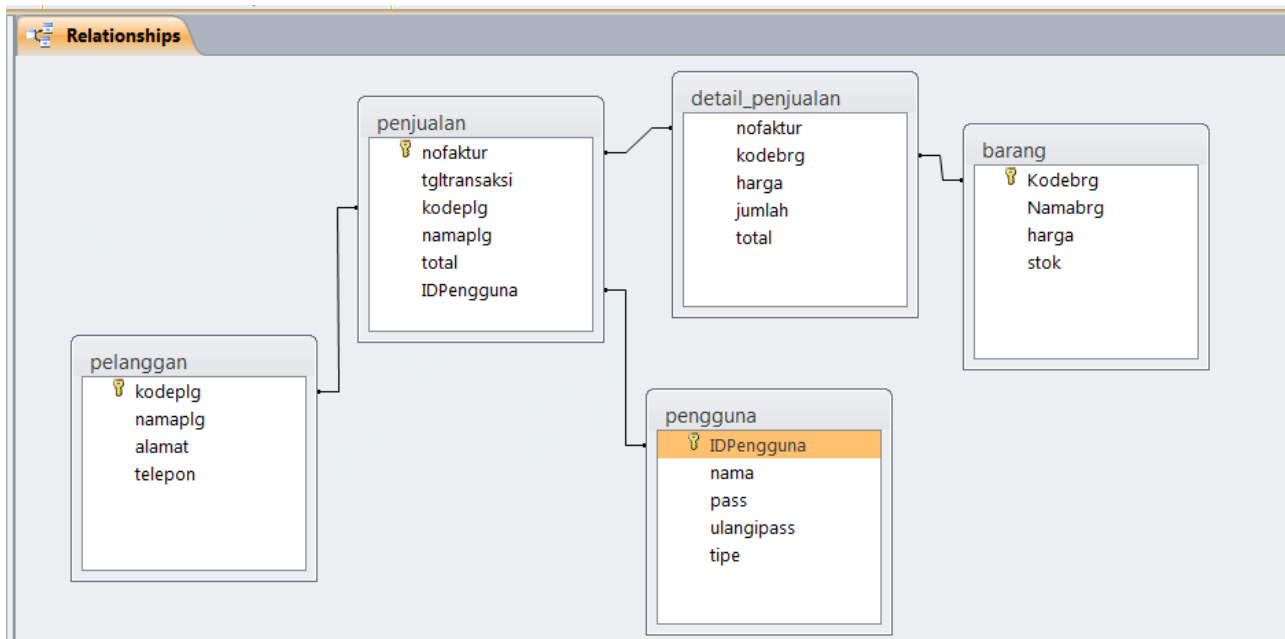
Tabel Pejualan

Field Name	Data Type
nofaktur	Text
tgltransaksi	Date/Time
kodeplg	Text
namaplg	Text
total	Currency
IDPegguna	Text

Tabel Detail\_penjualan

Field Name	Data Type
nofaktur	Text
kodebrg	Text
harga	Currency
jumlah	Number
total	Currency

### → Relasi Antar Tabel



```

Imports System.Data.OleDb
Public Class Penjualan
    Private Sub Penjualan_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load
        Call Koneksi()
        Call Nonaktif()

        Call tampilkodeplg()
    End Sub

    Sub Nonaktif()
        GJual.Enabled = False
        txttotal.Enabled = False
        txtdibayar.Enabled = False
        txtkembali.Enabled = False
    End Sub

    Sub Aktif()
        GJual.Enabled = True
        txttotal.Enabled = True
        txtdibayar.Enabled = True
    End Sub
End Class
    
```

```

        txtkembali.Enabled = True
    End Sub

    Sub No_Otomatis()
        CMD = New OleDbCommand("Select * from penjualan where nofaktur in
(select max(nofaktur) from penjualan) order by nofaktur desc", CONN)
        Dim urutan As String
        Dim hitung As Long
        RD = CMD.ExecuteReader
        RD.Read()
        If Not RD.HasRows Then
            urutan = "PJL-" + "0001"
        Else
            If Microsoft.VisualBasic.Mid(RD.GetString(0), 4, 2) Then
                urutan = "PJL-" + "0001"
            Else
                hitung = Microsoft.VisualBasic.Right(RD.GetString(0), 2) + 1
                urutan = "PJL-" + Microsoft.VisualBasic.Right("0000" & hitung,
4)
            End If
        End If
        End If
        txtnofaktur.Text = urutan
    End Sub

    Sub tampilkodeplg()
        cbokodeplg.Items.Clear()
        CMD = New OleDbCommand("select distinct kodeplg from pelanggan", CONN)
        RD = CMD.ExecuteReader
        While RD.Read
            cbokodeplg.Items.Add(RD.GetString(0))
        End While
    End Sub

    Private Sub cmdtambah_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles cmdtambah.Click
        Call Aktif()
        Call No_Otomatis()
    End Sub

    Private Sub cbokodeplg_SelectedIndexChanged(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles cbokodeplg.SelectedIndexChanged
        CMD = New OleDbCommand("select * from pelanggan where kodeplg='" &
cbokodeplg.Text & "'", CONN)
        RD = CMD.ExecuteReader
        RD.Read()
        If RD.HasRows = True Then
            txtnama.Text = RD.GetString(1)
        Else
            MsgBox("Data Pelanggan Tidak Ditemukan", MsgBoxStyle.Exclamation,
"Warning")
            txtnama.Focus()
        End If
    End Sub

    Private Sub cmdcari_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles cmdcari.Click
        DataBarang.Show()
    End Sub

    Sub CariTotal()
        On Error Resume Next
        CMD = New OleDbCommand("select sum(total) as ketemu from
temp_penjualan", CONN)
        RD = CMD.ExecuteReader

```

```

RD.Read()
If RD.HasRows Then
    txttotal.Text = RD.GetValue(0)
Else
    txttotal.Text = 0
End If

```

**End Sub**

**Sub Tampil\_tempjual()**

```

DA = New OleDbDataAdapter("Select * from temp_penjualan", CONN)
DS = New DataSet
DS.Clear()
DA.Fill(DS, "temp_penjualan")
DGVPenjualan.DataSource = (DS.Tables("temp_penjualan"))
DGVPenjualan.ReadOnly = True
'Call AturKolom()

```

**End Sub**

**Sub Bersih()**

```

txtkodebrg.Text = ""
txtnamabrg.Text = ""
txtjumlah.Text = ""
txtharga.Text = ""
txtstok.Text = ""

```

**End Sub**

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

```

CMD = New OleDbCommand("select * from temp_penjualan where
kode_barang='" & txtkodebrg.Text & "'", CONN)
RD = CMD.ExecuteReader
RD.Read()
If Not RD.HasRows Then
    Dim total As Integer
    total = Val(txtharga.Text) * Val(txtjumlah.Text)
    Dim sqlsimpan As String = "Insert into temp_penjualan
(kode_barang,nama_barang,harga,jumlah,total) values " & _
"('" & txtkodebrg.Text & "','" & txtnamabrg.Text & "','" &
txtharga.Text & "','" & txtjumlah.Text & "','" & total & "')"
    CMD = New OleDbCommand(sqlsimpan, CONN)
    CMD.ExecuteNonQuery()

    Call Tampil_tempjual()
    Call CariTotal()
    Call Bersih()
Else
    MsgBox("Data Tidak Valid", MsgBoxStyle.Critical, "Error")
End If

```

**End Sub**

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

```

'simpan ke tabel penjualan
Dim simpanmaster As String = "Insert into
Penjualan(nofaktur,tgltransaksi,kodeplg,namaplg,total,idpengguna) values " & _
"('" & txtnofaktur.Text & "','" & Tanggal.Text & "','" & cbokodeplg.Text
& "','" & txtnama.Text & "','" & txttotal.Text & "','" & MenuUtama.Panell1.Text &
"')"
CMD = New OleDbCommand(simpanmaster, CONN)
CMD.ExecuteNonQuery()

'bacalah tabel temporer
DA = New OleDbDataAdapter("select * from temp_penjualan", CONN)

```

```

DS = New DataSet
DA.Fill(DS)
DGVPenjualan.DataSource = DS.Tables
Dim TBL As DataTable = DS.Tables(0)
For baris As Integer = 0 To TBL.Rows.Count - 1

    Dim sqlsimpan As String = "Insert into
detail_penjualan(nofaktur,Kodebrg,harga,jumlah,total) values " & _
    "(" & txtnofaktur.Text & "," & TBL.Rows(baris)(0) & "," &
TBL.Rows(baris)(2) & "," & TBL.Rows(baris)(3) & "," & TBL.Rows(baris)(4) &
    ",)"

    CMD = New OleDbCommand(sqlsimpan, CONN)
    CMD.ExecuteNonQuery()

    'mengurangi stok data penjualan
    CMD = New OleDbCommand("select * from barang where kodebrg=" &
TBL.Rows(baris)(0) & "'", CONN)
    RD = CMD.ExecuteReader
    RD.Read()
    If RD.HasRows Then
        Dim kurangistok As String = "update barang set stok= '" &
RD.Item(3) - TBL.Rows(baris)(3) & "' where kodebrg=" & TBL.Rows(baris)(0) & "'"
        CMD = New OleDbCommand(kurangistok, CONN)
        CMD.ExecuteNonQuery()
    End If
Next baris
MsgBox("Data Penjualan Berhasil Disimpan", MsgBoxStyle.Information,
"Sukses")
DGVPenjualan.Columns.Clear()
HapusGrid()
Call Tampil_tempjual()
Call aturkolm()
Call Kosongkandata()
End Sub

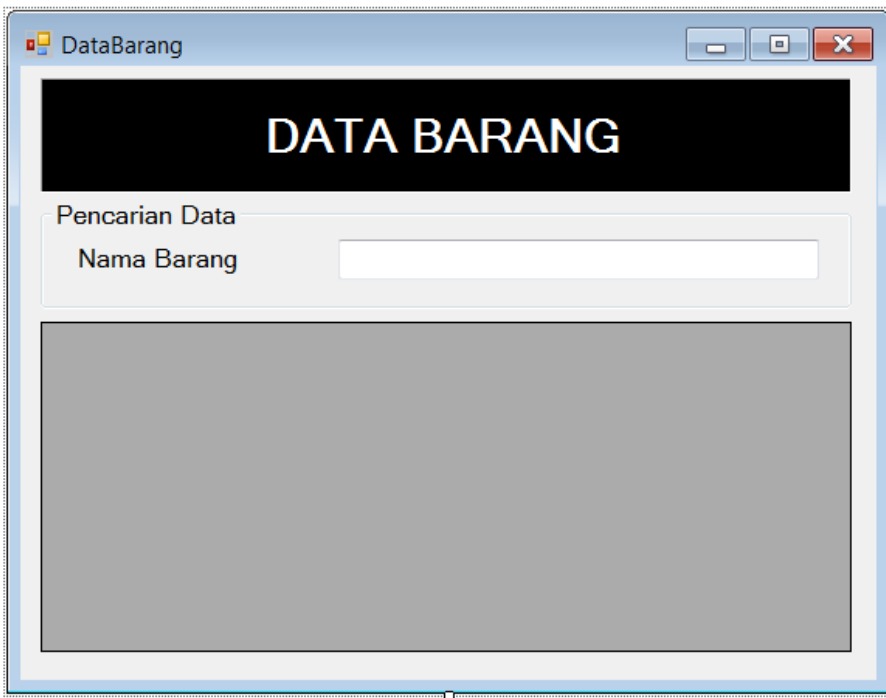
Sub Kosongkandata()
'buatlah kode untuk mengkosongkan semua data.
End Sub

Private Sub txttotal_TextChanged(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles txttotal.TextChanged
Dim totaldes As Integer
totaldes = txttotal.Text
txttotal.Text = Format(Val(totaldes), "###,###")
txttotal.SelectionStart = Len(txttotal.Text)
End Sub

Private Sub cmdbatal_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles cmdbatal.Click
Call HapusGrid()
End Sub
End Class

```

## → Data Cari Barang



```
Imports System.Data.OleDb
Public Class DataBarang
```

```
    Private Sub DataBarang_Load(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
        Call Koneksi()
        Call Tampilkan()
    End Sub
```

```
    Sub Tampilkan()
        DA = New OleDbDataAdapter("Select * from Barang", CONN)
        DS = New DataSet
        DS.Clear()
        DA.Fill(DS, "Barang")
        DGVBarang.DataSource = (DS.Tables("Barang"))
        DGVBarang.ReadOnly = True
    End Sub
```

```
    Private Sub txtcari_TextChanged(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles txtcari.TextChanged
        CMD = New OleDbCommand("select * from barang where Namabrg like '%" &
txtcari.Text & "%'", CONN)
        RD = CMD.ExecuteReader
        RD.Read()
        If RD.HasRows Then
            DA = New OleDbDataAdapter("select * from barang where Namabrg like
 '%" & txtcari.Text & "%'", CONN)
            DS = New DataSet
            DA.Fill(DS, "ketemu")
            DGVBarang.DataSource = DS.Tables("ketemu")
            DGVBarang.ReadOnly = True
        End If
    End Sub
```

```

Private Sub DGVBarang_CellMouseDoubleClick(ByVal sender As Object, ByVal e
As System.Windows.Forms.DataGridViewCellEventArgs) Handles
DGVBarang.CellMouseDoubleClick
    Dim baris As Integer
    With DGVBarang
        baris = .CurrentRow.Index
        With Penjualan
            .txtkodebrg.Text = DGVBarang(0, baris).Value
            .txtnamabrg.Text = DGVBarang(1, baris).Value
            .txtharga.Text = DGVBarang(2, baris).Value
            .txtstok.Text = DGVBarang(3, baris).Value
            .txtstok.Enabled = False
            .txtjumlah.Focus()
        End With
    End With
    Close()
End Sub
End Class

```

**➔ Laporan**

<b>LAPORAN DATA BARANG</b>			
<b>Kode Barang</b>	<b>Nama Barang</b>	<b>Harga</b>	<b>Stok</b>
B001	Sabun Life Boy	Rp4.500	6
B002	Pepsodent	Rp11.500	14
B003	Sikat Gigi Formula	Rp6.500	9
B004	Sampo Pentin	Rp12.500	25

Jambi, 18-Apr-2021  
Mengetahui

BAG. Gudang

```

Private Sub LaporanBarangToolStripMenuItem_Click(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles LaporanBarangToolStripMenuItem.Click
    With CR
        .ReportFileName = Application.StartupPath & "\laporan_barang.rpt"
        .DiscardSavedData = True
        .WindowState = Crystal.WindowStateConstants.crptMaximized
        .Action = 1
    End With
End Sub

```

**TUGAS :**

1. Buatlah form barang
2. Buatlah form pelanggan
3. Buatlah laporan lainnya.