

## LAMPIRAN

### CODING PROGRAM

#### FORM DISPLAY :

```
Private Sub Cmd_Cancel_Click()
```

```
    End
```

```
End Sub
```

```
Private Sub Cmd_OK_Click()
```

```
    If Txt_pass = "" Then
```

```
        MsgBox "Silahkan Masukkan Password Anda", vbInformation, "Information"
```

```
        Me.Txt_pass.SetFocus
```

```
    Else
```

```
        If Txt_pass.Text = Password Then
```

```
            Frm_Utama.Visible = True
```

```
            Me.Txt_pass.Text = ""
```

```
            Me.Hide
```

```
        Else
```

```
            MsgBox "Password yang Anda masukkan salah", vbCritical, "Password  
Salah"
```

```
            Me.Txt_pass.Text = ""
```

```
            Me.Txt_pass.SetFocus
```

```
        End If
```

```
    End If
```

```
End Sub
```

```

Private Sub Form_Initialize()
    X = PortIn(&H379)
    If X = 127 Then
        MsgBox "Maaf..., Hardware PC Digital Brankas Anda Belum Terhubung ke
Komputer..!", vbCritical, "Informasi"
    End
    Else
        MsgBox "Hardware PC Digital Brankas Sudah Terkoneksi Dengan Baik....!",
vbInformation, "Informasi"
    End If
End Sub
Private Sub Form_Load()
    Call LoadPass
    If Password = "" Then Password = 123456
End Sub
Private Sub Form_Unload(Cancel As Integer)
    Cancel = True
End Sub

Private Sub Txt_pass_Change()
    If Len(Me.Txt_pass.Text) = 6 Then
        Me.Cmd_OK.SetFocus
    Else
        Me.Txt_pass.SetFocus
    End If
End Sub

```

## FORM UTAMA :

Dim Key As Byte

```
Private Sub Cmd_Exit_Click()
```

```
    Lock_1
```

```
    Lock_2
```

```
    Lock_3
```

```
    End
```

```
End Sub
```

```
Private Sub Cmd_Info_Click()
```

```
    Frm_About.Show
```

```
    Me.Enabled = False
```

```
End Sub
```

```
Private Sub Cmd_Ubah_Click()
```

```
    Frm_Ubah.Show
```

```
    Me.Enabled = False
```

```
End Sub
```

```
Private Sub Form_Load()
```

```
    PortOut &H37A, &H0 ' Basic Operation
```

```
    PortOut &H378, &H82 ' Control Word
```

```
    PortOut &H37A, &H4
```

```
    PortOut &H378, &H0
```

```
    Me.Hide
```

```
    Me.Txt_Display.Enabled = False
```

```
    Frm_Pass.Show
```

```

Lock_1
Me.Lbl_Status1.Caption = "Lock"
Lock_2
Me.Lbl_Status2.Caption = "Lock"
Lock_3
Me.Lbl_Status3.Caption = "Lock"
End Sub

Private Sub Form_Unload(Cancel As Integer)
    Cancel = True
End Sub

Private Sub Timer1_Timer()
    Key = BacaPort("Keypad")
    If Key = 15 Then
    Else
        Me.Timer1.Enabled = False
        Me.Timer2.Enabled = True
    End If
End Sub

Private Sub Timer2_Timer()
    Sleep 100
    If Key = 10 Then
        Me.Txt_Display.Text = Txt_Display.Text & "*"
        Timer2.Enabled = False
        Timer1.Enabled = True
    ElseIf Key = 11 Then
        Sleep 100

```

```

Call Cek_Password
Timer2.Enabled = False
Timer1.Enabled = True
Else
Me.Txt_Display.Text = Txt_Display.Text & Key
Timer1.Enabled = True
Timer2.Enabled = False
End If
End Sub

```

```

Public Sub Cek_Password()
If Me.Txt_Display.Text = "*123" Then
Call Unlock_1
Me.Lbl_Status1.Caption = "Unlock"
Call Unlock_2
Me.Lbl_Status2.Caption = "Unlock"
Call Unlock_3
Me.Lbl_Status3.Caption = "Unlock"
Me.Txt_Display.Text = ""
Me.Txt_Display.Enabled = False
Me.Txt_Display.BackColor = vbBlack
ElseIf Txt_Display.Text = "" Then
Call Lock_1
Me.Lbl_Status1.Caption = "Lock"
Call Lock_2
Me.Lbl_Status2.Caption = "Lock"
Call Lock_3
Me.Lbl_Status3.Caption = "Lock"
Me.Txt_Display.Enabled = True

```

```

Me.Txt_Display.BackColor = vbWhite
Me.Txt_Display.Enabled = False
Else
Me.Txt_Display.Text = ""
End If
End Sub

'Instruksi Penulisan
'-----
Public Sub Write_Inst()

    Call Clr_RS          ' RS=0
    PortOut &H37A, &H4
    PortOut &H378, &H80  'Buffer1
    PortOut &H37A, &H1
    PortOut &H37A, &H5  'Set Siap Tulis Kembali
'-----

    Call Set_EN
    Sleep 250
    Call Clr_EN
End Sub

'Penulisan Data
'-----
Public Sub Write_Data()

    PortOut &H37A, &H4
    SetPortBit &H378, 3
    PortOut &H37A, &H3  ' Basic Configuration

```

```
PortOut &H37A, &H7
Sleep 100
PortOut &H37A, &H4
PortOut &H378, &HFF
PortOut &H37A, &H1
PortOut &H37A, &H5
Sleep 100
PortOut &H37A, &H4
SetPortBit &H378, 4
PortOut &H37A, &H3 ' Basic Configuration
PortOut &H37A, &H7
Sleep 250
PortOut &H37A, &H4
ClrPortBit &H378, 4
PortOut &H37A, &H3 ' Basic Configuration
PortOut &H37A, &H7
```

End Sub

## FORM UBAH PASSWORD :

```
Private Sub Cmd_Cancel_Click()
```

```
    Me.Hide
```

```
    Frm_Utama.Show
```

```
    Frm_Utama.Enabled = True
```

```
End Sub
```

```
Private Sub Cmd_OK_Click()
```

```
If Txt_Passawal.Text = "" Or Txt_Passbaru.Text = "" Or Txt_Konfirm.Text = ""
```

```
Then
```

```
MsgBox "Password yang Anda Masukkan Tidak lengkap", vbInformation,  
"Informasi"
```

```
Else
```

```
    If Len(Txt_Passbaru) < 6 Then
```

```
        MsgBox "Pengisian Kode kunci baru minimal 6 karakter", vbInformation,  
"Informasi"
```

```
    Else
```

```
        If Txt_Passawal <> Password Then
```

```
            MsgBox "Password lama Anda Tidak dikenal", vbCritical, "Kesalahan"
```

```
        Else
```

```
            If Txt_Passbaru <> Txt_Konfirm Then
```

```
                MsgBox "Konfirmasi Password Anda salah", vbCritical, "Kesalahan"
```

```
                Me.Txt_Passawal.SetFocus
```

```
            Else
```

```
                KeyValue = Txt_Passbaru.Text
```

```
                BackValue = RegSetValueEx(keyID, "KodePass", 0&, REG_SZ, ByVal
```

```
                KeyValue, Len(KeyValue) + 1)
```

```
                Password = Txt_Passawal.Text
```



```
        Frm_Utama.Enabled = True
        Unload Me
    End If
End If
End If
End Sub
```

### **FORM INFORMASI :**

```
Private Sub Command1_Click()
    Unload Me
    Frm_Utama.Show
    Frm_Utama.Enabled = True
    Tmr_Hide.Enabled = False
End Sub
```

```
Private Sub Form_Unload(Cancel As Integer)
    Cancel = True
End Sub
```

## MODULE :

'Keterangan Koneksi Keluaran IC 82C55

```
'=====
'- Port B.0 ----> Lock 1
'- Port B.1 ----> Lock 2
'- Port B.2 ----> Lock 3
'- Port B.3 ----> RS LCD
'----- PORT B
'- Port A.0,1,2,3 ----> Input Keypad
'- Port A.4,5,6,7 ----> GND
'----- PORT A
'
```

'Keterangan Koneksi LPT ----> IC 82C55

```
'=====
'Ket, Koneksi dari port kontrol (37AH) ke pin PPI
'C3 terhubung ke pin -RD (5)----> Aktif Low
'C2 terhubung ke pin -WR (36)----> Aktif Low
'C1 terhubung ke pin A1 (8)
'C0 terhubung ke pin A0 (9)
'
```

'Ket, Koneksi dari PORT DATA (378H) ke pin PPI

```
'-----
'D7 terhubung ke pin D7 (27)
'D6 terhubung ke pin D6 (28)
'D5 terhubung ke pin D5 (29)
'D4 terhubung ke pin D4 (30)
'D3 terhubung ke pin D3 (31)
'D2 terhubung ke pin D2 (32)
```

'D1 terhubung ke pin D1 (33)

'D0 terhubung ke pin D0 (34)

'=====

'Ket, koneksi - koneksi Pin PPI

'-----

'Pin -CS (6) terhubung ke GND

'Pin GND (7) terhubung ke 0V

'Pin RESET (35)terhubung ke GND

'Pin VCC (26) terhubung ke +5V

Public Declare Sub PortOut Lib "IO.DLL" (ByVal Port As Integer, ByVal Data As Byte)

Public Declare Function PortIn Lib "IO.DLL" (ByVal Port As Integer) As Byte

Public Declare Sub SetPortBit Lib "IO.DLL" (ByVal Port As Integer, ByVal Bit As Byte)

Public Declare Sub ClrPortBit Lib "IO.DLL" (ByVal Port As Integer, ByVal Bit As Byte)

Public Declare Sub Sleep Lib "kernel32" (ByVal dwMilliseconds As Long)

Public Declare Function RegCreateKey Lib "advapi32.dll" Alias "RegCreateKeyA" (ByVal hKey As Long, ByVal lpSubKey As String, phkResult As Long) As Long

Public Declare Function RegDeleteKey Lib "advapi32.dll" Alias "RegDeleteKeyA" (ByVal hKey As Long, ByVal lpSubKey As String) As Long

Public Declare Function RegDeleteValue Lib "advapi32.dll" Alias "RegDeleteValueA" (ByVal hKey As Long, ByVal lpValueName As String) As Long

Public Declare Function RegQueryValueEx Lib "advapi32.dll" Alias "RegQueryValueExA" (ByVal hKey As Long, ByVal lpValueName As String,

ByVal lpReserved As Long, lpType As Long, lpData As Any, lpcbData As Long) As Long

Public Declare Function RegSetValueEx Lib "advapi32.dll" Alias "RegSetValueExA" (ByVal hKey As Long, ByVal lpValueName As String, ByVal Reserved As Long, ByVal dwType As Long, lpData As Any, ByVal cbData As Long) As Long

Public BackValue As Long

Public KeyValue As String

Public keyID As Long

Public Const HKEY\_LOCAL\_MACHINE = &H80000002

Public Const REG\_SZ = 1

Public Const regKey = "Software\PC DB"

Public Password As String

Dim Buffer1 As Byte

Public Function GetRegistryValue(ByVal hKey As Long, ByVal KeyName As String, \_

ByVal ValueName As String, ByVal KeyType As Integer, \_

Optional DefaultValue As Variant = Empty) As Variant

Dim resString As String, Length As Long

GetRegistryValue = DefaultValue

Length = 1024: resString = Space\$(Length)

If RegQueryValueEx(keyID, KeyName, 0, REG\_SZ, \_

ByVal resString, Length) = 0 Then

GetRegistryValue = Left\$(resString, Length - 1)

End If

End Function

Public Sub LoadPass()

```

BackValue = RegCreateKey(HKEY_LOCAL_MACHINE, regKey, keyID)
Password = GetRegistryValue(keyID, "KodePass", ByVal KeyValue, REG_SZ,
Empty)
End Sub

```

```

' Inisialisasi LOCK

```

```

'=====
=====

```

```

Public Sub Lock_1()

```

```

    PortOut &H37A, &H4

```

```

    ClrPortBit &H378, 0 ' Data Yang dikeluarkan pada port 378 (Data)

```

```

    PortOut &H37A, &H3 ' Basic Configuration

```

```

    PortOut &H37A, &H7

```

```

End Sub

```

```

Public Sub Unlock_1()

```

```

    PortOut &H37A, &H4

```

```

    SetPortBit &H378, 0 ' Data Yang dikeluarkan pada port 378 (Data)

```

```

    PortOut &H37A, &H3 ' Basic Configuration

```

```

    PortOut &H37A, &H7

```

```

End Sub

```

```

Public Sub Lock_2()

```

```

    PortOut &H37A, &H4

```

```

    ClrPortBit &H378, 1 ' Data Yang dikeluarkan pada port 378 (Data)

```

```

    PortOut &H37A, &H3 ' Basic Configuration

```

```

    PortOut &H37A, &H7

```

```

End Sub

```

```

Public Sub Unlock_2()

```

```

    PortOut &H37A, &H4

```

```

SetPortBit &H378, 1 ' Data Yang dikeluarkan pada port 378 (Data)
PortOut &H37A, &H3 ' Basic Configuration
PortOut &H37A, &H7
End Sub
Public Sub Lock_3()
PortOut &H37A, &H4
ClrPortBit &H378, 2 ' Data Yang dikeluarkan pada port 378 (Data)
PortOut &H37A, &H3 ' Basic Configuration
PortOut &H37A, &H7
End Sub
Public Sub Unlock_3()
PortOut &H37A, &H4
SetPortBit &H378, 2 ' Data Yang dikeluarkan pada port 378 (Data)
PortOut &H37A, &H3 ' Basic Configuration
PortOut &H37A, &H7
End Sub

```

```

'=====
=====
' Inisialisasi KEYPAD
'=====
=====

```

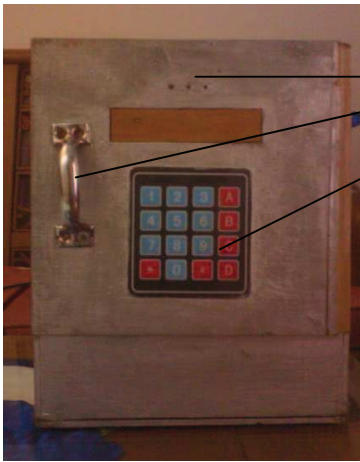
```

Public Function BacaPort(ByVal Nama_Port As String) As Byte
Dim temp As Byte
temp = PortIn(&H37A)
Select Case Nama_Port
Case "Keypad"
PortOut &H37A, &H2E '0010 1110

```

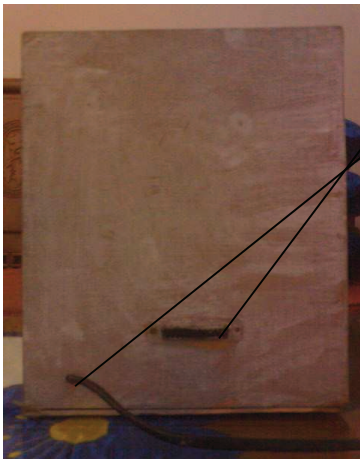
```
BacaPort = PortIn(&H378)
PortOut &H37A, &H0
Case Else
Exit Function
PortOut &H37A, temp - 32 'kembalikan port data pada mode tulis
End Select
End Function
```

**Gambar Brankas Depan :**



1. Lampu Indikator
2. Handle Pintu Brankas
3. Keypad Matrix

**Gambar Brankas Belakang :**



1. Port Paralell
2. Kabel Listrik



## **Gambar Komponen :**

### **Gambar IC 82C55 :**



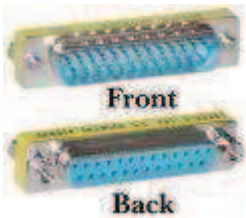
Komponen Pendukung (IC)

### **Gambar IC ULN 2003 :**



Transistor / Komponen Pendukung 2

### **Gambar DB 25 Female :**



Port Paralell

### Gambar Pcb :



Wadah / Tempat Komponen

### Gambar Keypad Matrix 4x4 :



### Gambar Kapasitor 10uf/16 volt :



Satuan Volt dari hambatan

### **Gambar Resistor 10k Ohm :**



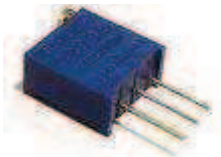
Hambatan Tegangan

### **Gambar Resistor 330 Ohm :**



Hambatan Tegangan

### **Gambar Variabel Resistor 10k Ohm :**



Kumpulan satuan tegangan itu sendiri / Penghubung kumpulan Resistor

**Gambar Selenoid :**



Kunci penggerak

**Gambar Transistor :**



Kumpulan / Penerima hambatan