

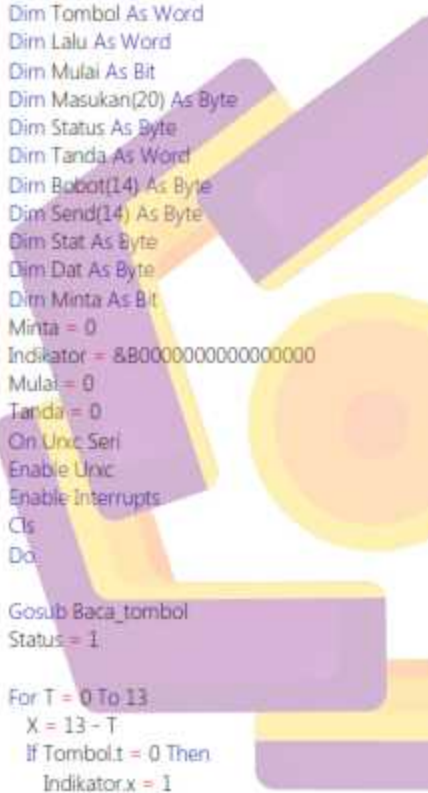
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LAMPIRAN

Source code Bascom AVR

```
$regfile = 'm15def.dat'  
$crystal = 8000000  
$baud = 9600  
  
Config Lcdpin = Pin, Db4 = Portc.4, Db5 = Portc.3, Db6 = Portc.2, Db7 = Portc.1, E =  
Portc.5, Rs = Portc.6 'configurasi pin LCD  
Config Lcd = 16 * 2 'configurasi type LCD  
Cursor Off  
Config Pina.0 = Input  
Set Porta.0  
Config Porta.1 = Output 'configurasi port A  
sebagai output 1 'configurasi port A.1  
Config Porta.2 = Output 'configurasi port A.1  
sebagai output 2  
Config Porta.3 = Output 'configurasi port A.1  
sebagai output 3  
Config Porta.4 = Output 'configurasi port A.1  
sebagai output 4  
  
'-----SIPO-----  
Config Portb.0 = Output 'data  
Config Portb.1 = Output 'reset  
Config Portb.2 = Output 'ck  
  
Config Portc.0 = Output  
Backlight Alias Portc.0  
Set Backlight  
Upperline  
Lcd * Alat Pemanggil *  
Lowerline  
Lcd * Perawat *  
Wait 1  
Reset Backlight  
Waitms 200  
Set Backlight
```



```
Dim A As String * 3
Dim X As Byte
Dim T As Byte
Dim Indikator As Word
Dim Mux As Byte
Dim Tombol As Word
Dim Lalu As Word
Dim Mulai As Bit
Dim Masukan(20) As Byte
Dim Status As Byte
Dim Tanda As Word
Dim Bobot(14) As Byte
Dim Send(14) As Byte
Dim Stat As Byte
Dim Dat As Byte
Dim Minta As Bit
Minta = 0
Indikator = &B0000000000000000
Mulai = 0
Tanda = 0
On Unix Seri
Enable Unix
Enable Interrupts
Cls
Do

Gosub Baca_tombol
Status = 1

For T = 0 To 13
    X = 13 - T
    If Tombol.t = 0 Then
        Indikator.x = 1
        Tanda.t = 1
    End If
    If Tanda.t = 1 And Tombol.t = 1 Then
        Incr Bobot(status)
        If Bobot(status) > 3 Then Bobot(status) = 3
        Tanda.t = 0
    End If
```

Incr Status
Next

Upperline

```
Lcd * * ; Tombol.13 ; Tombol.12 ; Tombol.11 ; Tombol.10 ; Tombol.9 ; Tombol.8 ;  
Tombol.7 ; Tombol.6 ; Tombol.5 ; Tombol.4 ; Tombol.3 ; Tombol.2 ; Tombol.1 ; Tombol.0  
Lcd * EDCBA987654321 *
```

Lowerline

```
Lcd * * ; Bobot.14 ; Bobot.13 ; Bobot.12 ; Bobot.11 ; Bobot.10 ; Bobot.9 ; Bobot.8 ;  
Bobot.7 ; Bobot.6 ; Bobot.5 ; Bobot.4 ; Bobot.3 ; Bobot.2 ; Bobot.1
```

```
If Indikator <> Lalu Then Gosub Led
```

```
Lalu = Indikator
```

```
If Mulai = 1 Then
```

```
  Mulai = 0
```

```
  Select Case Dat
```

```
    Case &H10 :
```

```
      Indikator.13 = 0
```

```
      Bobot.1 = 0
```

```
    Case &H20 :
```

```
      Indikator.12 = 0
```

```
      Bobot.2 = 0
```

```
    Case &H30 :
```

```
      Indikator.11 = 0
```

```
      Bobot.3 = 0
```

```
    Case &H40 :
```

```
      Indikator.10 = 0
```

```
      Bobot.4 = 0
```

```
    Case &H50 :
```

```
      Indikator.9 = 0
```

```
      Bobot.5 = 0
```

```
    Case &H60 :
```

```
      Indikator.8 = 0
```

```
      Bobot.6 = 0
```

```
    Case &H70 :
```

```
      Indikator.7 = 0
```

```
      Bobot.7 = 0
```

```
    Case &H80 :
```

```
      Indikator.6 = 0
```

```
      Bobot.8 = 0
```

```
    Case &H90 :
```



```
Indikator.5 = 0
Bobot(9) = 0
Case &HA0 :
  Indikator.4 = 0
  Bobot(10) = 0
Case &HB0 :
  Indikator.3 = 0
  Bobot(11) = 0
Case &HC0 :
  Indikator.2 = 0
  Bobot(12) = 0
Case &HD0 :
  Indikator.1 = 0
  Bobot(13) = 0
Case &HE0 :
  Indikator.0 = 0
  Bobot(14) = 0
Case 42 :
  Indikator = 0
  For Status = 1 To 14
    Bobot(status) = 0
  Next
End Select
End If
If Minta = 1 Then
  Minta = 0
  Gosub Kirim
End If
Loop

Seri:
  Dat = Udr
  If Dat <> 255 Then
    Mulai = 1
  Else
    Minta = 1
  End If
Return

Kirim:
```

```

Send(1) = Bobot(1) + &B00010000
Send(2) = Bobot(2) + &B00100000
Send(3) = Bobot(3) + &B00110000
Send(4) = Bobot(4) + &B01000000
Send(5) = Bobot(5) + &B01010000
Send(6) = Bobot(6) + &B01100000
Send(7) = Bobot(7) + &B01110000
Send(8) = Bobot(8) + &B10000000
Send(9) = Bobot(9) + &B10010000
Send(10) = Bobot(10) + &B10100000
Send(11) = Bobot(11) + &B10110000
Send(12) = Bobot(12) + &B11000000
Send(13) = Bobot(13) + &B11010000
Send(14) = Bobot(14) + &B11100000
Printbin Send(1);
For T = 1 To 14
  Send(t) = 0
Next
Return

Led:
Reset Portb.1
Set Portb.1
For X = 0 To 15
  Portb.2 = 0
  Portb.0 = Indikator.x
  Portb.2 = 1
Next
Return

Baca_tombol:
For Mux = 0 To 13
  Porta.4 = Mux.0
  Porta.3 = Mux.1
  Porta.2 = Mux.2
  Porta.1 = Mux.3
  Waitms 1
  Tombol.mux = Pina.0
Next
Return

```



Form utama

```
Private Declare Function PlaySound Lib "winmm.dll" Alias "PlaySoundA" (ByVal lpszName As String, ByVal hModule As Long, ByVal dwFlags As Long) As Long
Dim NilaiInput As String
Dim data(14) As Byte
Dim status As Byte
Dim geser As Byte
Dim waktu(14) As String
Dim st(14) As String
Dim jenis(14) As String
Dim warna(14) As String

Public Function PlayWaveFile(strFileName As String, Optional binAsync As Boolean) As Boolean
    Dim lngFlags As Long
    Const snd_sync = &H0
    Const snd_async = &H1
    Const snd_nodetault = &H2
    Const snd_filename = &H20000
    lngFlags = snd_nodetault Or snd_filename Or snd_sync
    If binAsync Then lngFlags = lngFlags Or snd_async
    PlayWaveFile = PlaySound(strFileName, 0&, lngFlags)
End Function

Private Sub CmdLaporan_Click()
    Form1.Visible = True
End Sub

Private Sub CmdReset_Click()
    If MSComm1.PortOpen = True Then MSComm1.Output = ""
End Sub

Private Sub Command2_Click()
    If Command2.Caption = "Start" Then
        On Error GoTo Error
        MSComm1.CommPort = Combo1.Text
        MSComm1.PortOpen = True
    End If
End Sub
```

```
Command2.Caption = "Stop"  
Timer1.Enabled = True
```

```
'SET BUTTON
```

```
Lblkamar1.Enabled = True  
Lblkamar2.Enabled = True  
Lblkamar3.Enabled = True  
Lblkamar4.Enabled = True  
Lblkamar5.Enabled = True  
Lblkamar6.Enabled = True  
Lblkamar7.Enabled = True  
Lblkamar8.Enabled = True  
Lblkamar9.Enabled = True  
LblkamarA.Enabled = True  
LblkamarB.Enabled = True  
LblkamarC.Enabled = True  
LblkamarD.Enabled = True  
LblkamarE.Enabled = True
```

```
GoTo No_error
```

```
Error:
```

```
MsgBox "port tidak sesuai", vbOKOnly, "warning"
```

```
No_error:
```

```
ElseIf Command2.Caption = "Stop" Then
```

```
MSComm1.PortOpen = False  
Command2.Caption = "Start"  
Timer1.Enabled = False
```

```
'button
```

```
Lblkamar1.Enabled = False  
Lblkamar2.Enabled = False  
Lblkamar3.Enabled = False  
Lblkamar4.Enabled = False  
Lblkamar5.Enabled = False  
Lblkamar6.Enabled = False  
Lblkamar7.Enabled = False  
Lblkamar8.Enabled = False  
Lblkamar9.Enabled = False
```



```
LblkamarA.Enabled = False  
LblkamarB.Enabled = False  
LblkamarC.Enabled = False  
LblkamarD.Enabled = False  
LblkamarE.Enabled = False
```

```
End If
```

```
End Sub
```

```
Private Sub Form_Load()
```

```
Timer1.Enabled = False  
Lblkamar1.BackColor = vbGreen  
Lblkamar2.BackColor = vbGreen  
Lblkamar3.BackColor = vbGreen  
Lblkamar4.BackColor = vbGreen  
Lblkamar5.BackColor = vbGreen  
Lblkamar6.BackColor = vbGreen  
Lblkamar7.BackColor = vbGreen  
Lblkamar8.BackColor = vbGreen  
Lblkamar9.BackColor = vbGreen  
LblkamarA.BackColor = vbGreen  
LblkamarB.BackColor = vbGreen  
LblkamarC.BackColor = vbGreen  
LblkamarD.BackColor = vbGreen  
LblkamarE.BackColor = vbGreen
```

```
Lblkamar1.Enabled = False  
Lblkamar2.Enabled = False  
Lblkamar3.Enabled = False  
Lblkamar4.Enabled = False  
Lblkamar5.Enabled = False  
Lblkamar6.Enabled = False  
Lblkamar7.Enabled = False  
Lblkamar8.Enabled = False  
Lblkamar9.Enabled = False  
LblkamarA.Enabled = False  
LblkamarB.Enabled = False  
LblkamarC.Enabled = False
```

```
LblkamarD.Enabled = False  
LblkamarE.Enabled = False
```

```
End Sub
```

```
Private Sub Lblkamar1_Click()  
If MSComm1.PortOpen = True Then MSComm1.Output = Chr(Val("&H" & "10"))  
If st(1) <> 0 Then  
Ad.Recordset.AddNew  
Me.Ad.Recordset.Fields(1) = "kamar 1"  
Me.Ad.Recordset.Fields(2) = jenis(1)  
Me.Ad.Recordset.Fields(3) = waktu(1)  
Me.Ad.Recordset.Fields(4) = Format(Now, "dd/mm/yyyy H:ms")  
Ad.Recordset.Update  
End If  
End Sub
```

```
Private Sub Lblkamar2_Click()  
If MSComm1.PortOpen = True Then MSComm1.Output = Chr(Val("&H" & "20"))  
If st(2) <> 0 Then  
Ad.Recordset.AddNew  
Me.Ad.Recordset.Fields(1) = "kamar 2"  
Me.Ad.Recordset.Fields(2) = jenis(2)  
Me.Ad.Recordset.Fields(3) = waktu(2)  
Me.Ad.Recordset.Fields(4) = Format(Now, "dd/mm/yyyy H:ms")  
Ad.Recordset.Update  
End If  
End Sub
```

```
Private Sub Lblkamar3_Click()  
If MSComm1.PortOpen = True Then MSComm1.Output = Chr(Val("&H" & "30"))  
If st(3) <> 0 Then  
Ad.Recordset.AddNew  
Me.Ad.Recordset.Fields(1) = "kamar 3"  
Me.Ad.Recordset.Fields(2) = jenis(3)  
Me.Ad.Recordset.Fields(3) = waktu(3)  
Me.Ad.Recordset.Fields(4) = Format(Now, "dd/mm/yyyy H:ms")  
Ad.Recordset.Update  
End If  
End Sub
```

```
Private Sub Lblkamar4_Click()  
    If MSComm1.PortOpen = True Then MSComm1.Output = Chr(Val("&H" & "40"))  
    If st(4) <> 0 Then  
        Ad.Recordset.AddNew  
        Me.Ad.Recordset.Fields(1) = "kamar 4"  
        Me.Ad.Recordset.Fields(2) = jenis(4)  
        Me.Ad.Recordset.Fields(3) = waktu(4)  
        Me.Ad.Recordset.Fields(4) = Format(Now, "dd/mm/yyyy H:m:s")  
        Ad.Recordset.Update  
    End If  
End Sub
```

```
Private Sub Lblkamar5_Click()  
    If MSComm1.PortOpen = True Then MSComm1.Output = Chr(Val("&H" & "50"))  
    If st(5) <> 0 Then  
        Ad.Recordset.AddNew  
        Me.Ad.Recordset.Fields(1) = "kamar 5"  
        Me.Ad.Recordset.Fields(2) = jenis(5)  
        Me.Ad.Recordset.Fields(3) = waktu(5)  
        Me.Ad.Recordset.Fields(4) = Format(Now, "dd/mm/yyyy H:m:s")  
        Ad.Recordset.Update  
    End If  
End Sub
```

```
Private Sub Lblkamar6_Click()  
    If MSComm1.PortOpen = True Then MSComm1.Output = Chr(Val("&H" & "60"))  
    If st(6) <> 0 Then  
        Ad.Recordset.AddNew  
        Me.Ad.Recordset.Fields(1) = "kamar 6"  
        Me.Ad.Recordset.Fields(2) = jenis(6)  
        Me.Ad.Recordset.Fields(3) = waktu(6)  
        Me.Ad.Recordset.Fields(4) = Format(Now, "dd/mm/yyyy H:m:s")  
        Ad.Recordset.Update  
    End If  
End Sub
```

```
Private Sub Lblkamar7_Click()  
    If MSComm1.PortOpen = True Then MSComm1.Output = Chr(Val("&H" & "70"))  
    If st(7) <> 0 Then
```

```
Ad.Recordset.AddNew
Me.Ad.Recordset.Fields(1) = "kamar 7"
Me.Ad.Recordset.Fields(2) = jenis(7)
Me.Ad.Recordset.Fields(3) = waktu(7)
Me.Ad.Recordset.Fields(4) = Format(Now, "dd/mm/yyyy H:m:s")
Ad.Recordset.Update
End If
End Sub
```

```
Private Sub Lbkamar8_Click()
    If MSComm1.PortOpen = True Then MSComm1.Output = Chr(Val("&H" & "80"))
    If st(8) <> 0 Then
        Ad.Recordset.AddNew
        Me.Ad.Recordset.Fields(1) = "kamar 8"
        Me.Ad.Recordset.Fields(2) = jenis(8)
        Me.Ad.Recordset.Fields(3) = waktu(8)
        Me.Ad.Recordset.Fields(4) = Format(Now, "dd/mm/yyyy H:m:s")
        Ad.Recordset.Update
    End If
End Sub
```

```
Private Sub Lbkamar9_Click()
    If MSComm1.PortOpen = True Then MSComm1.Output = Chr(Val("&H" & "90"))
    If st(9) <> 0 Then
        Ad.Recordset.AddNew
        Me.Ad.Recordset.Fields(1) = "kamar 9"
        Me.Ad.Recordset.Fields(2) = jenis(9)
        Me.Ad.Recordset.Fields(3) = waktu(9)
        Me.Ad.Recordset.Fields(4) = Format(Now, "dd/mm/yyyy H:m:s")
        Ad.Recordset.Update
    End If
End Sub
```

```
Private Sub LbkamarA_Click()
    If MSComm1.PortOpen = True Then MSComm1.Output = Chr(Val("&H" & "A0"))
    If st(10) <> 0 Then
        Ad.Recordset.AddNew
        Me.Ad.Recordset.Fields(1) = "kamar A"
        Me.Ad.Recordset.Fields(2) = jenis(10)
        Me.Ad.Recordset.Fields(3) = waktu(10)
    End If
End Sub
```

```
Me.Ad.Recordset.Fields(4) = Format(Now, "dd/mm/yyyy H:m:s")
Ad.Recordset.Update
End If
End Sub
```

```
Private Sub LblkamarB_Click()
If MSComm1.PortOpen = True Then MSComm1.Output = Chr(Val("&H" & "B0"))
If st(11) <> 0 Then
Ad.Recordset.AddNew
Me.Ad.Recordset.Fields(1) = "kamar B"
Me.Ad.Recordset.Fields(2) = jenis(11)
Me.Ad.Recordset.Fields(3) = waktu(11)
Me.Ad.Recordset.Fields(4) = Format(Now, "dd/mm/yyyy H:m:s")
Ad.Recordset.Update
End If
End Sub
```

```
Private Sub LblkamarC_Click()
If MSComm1.PortOpen = True Then MSComm1.Output = Chr(Val("&H" & "C0"))
If st(12) <> 0 Then
Ad.Recordset.AddNew
Me.Ad.Recordset.Fields(1) = "kamar C"
Me.Ad.Recordset.Fields(2) = jenis(12)
Me.Ad.Recordset.Fields(3) = waktu(12)
Me.Ad.Recordset.Fields(4) = Format(Now, "dd/mm/yyyy H:m:s")
Ad.Recordset.Update
End If
End Sub
```

```
Private Sub LblkamarD_Click()
If MSComm1.PortOpen = True Then MSComm1.Output = Chr(Val("&H" & "D0"))
If st(13) <> 0 Then
Ad.Recordset.AddNew
Me.Ad.Recordset.Fields(1) = "kamar D"
Me.Ad.Recordset.Fields(2) = jenis(13)
Me.Ad.Recordset.Fields(3) = waktu(13)
Me.Ad.Recordset.Fields(4) = Format(Now, "dd/mm/yyyy H:m:s")
Ad.Recordset.Update
End If
End Sub
```

```

Private Sub LblkamarE_Click()
    If MSComm1.PortOpen = True Then MSComm1.Output = Chr(Val("&H" & "E0"))
    If st(14) <> 0 Then
        Ad.Recordset.AddNew
        Me.Ad.Recordset.Fields(1) = "kamar E"
        Me.Ad.Recordset.Fields(2) = jenis(14)
        Me.Ad.Recordset.Fields(3) = waktu(14)
        Me.Ad.Recordset.Fields(4) = Format(Now, "dd/mm/yyyy H:m:s")
        Ad.Recordset.Update
    End If
End Sub

Private Sub MSComm1_OnComm()
    If MSComm1.CommEvent = _comEvReceive Then
        NilaiInput = MSComm1.Input
        status = Asc(NilaiInput)
        status = status / 16
        data(status) = Asc(NilaiInput)
    End If
End Sub

Private Sub Timer1_Timer()
    Dim total As Byte
    total = 0
    For status = 1 To 14
        geser = 16 * status
        If data(status) >= geser Then data(status) = data(status) - geser
        Select Case data(status)
            Case 0: warna(status) = vbGreen
                waktu(status) = ""
            Case 1: warna(status) = vbYellow
                If waktu(status) = "" Then
                    waktu(status) = Format(Now, "yyyy-mm-dd H:m:s")
                End If
            Case 2: warna(status) = vbBlue
            Case 3: warna(status) = vbRed
        End Select
        total = total + data(status)
        st(status) = data(status)
    Next status
End Sub

```

```
Select Case st(status)
Case 1: jenis(status) = "Perawatan Biasa"
Case 2: jenis(status) = "Perawatan Infus"
Case 3: jenis(status) = "Perawatan Darurat"
End Select
```

```
Next
```

```
If total <> 0 Then repval = PlayWaveFile(App.Path & "\click1.wav", True) 'music
```

```
Lblkamar1.BackColor = warna(1)
```

```
Lblkamar2.BackColor = warna(2)
```

```
Lblkamar3.BackColor = warna(3)
```

```
Lblkamar4.BackColor = warna(4)
```

```
Lblkamar5.BackColor = warna(5)
```

```
Lblkamar6.BackColor = warna(6)
```

```
Lblkamar7.BackColor = warna(7)
```

```
Lblkamar8.BackColor = warna(8)
```

```
Lblkamar9.BackColor = warna(9)
```

```
LblkamarA.BackColor = warna(10)
```

```
LblkamarB.BackColor = warna(11)
```

```
LblkamarC.BackColor = warna(12)
```

```
LblkamarD.BackColor = warna(13)
```

```
LblkamarE.BackColor = warna(14)
```

```
status = 1
```

```
MSComm1.Output = Chr(255)
```

```
End Sub
```

```
Private Sub TmrJam_Timer()
```

```
LblJam.FontBold = True
```

```
LblJam.Alignment = vbCenter
```

```
LblJam.FontSize = 12
```

```
LblJam.Caption = Time
```

```
LblTanggal.Caption = Format(Now, "dddd,yyyy-mm-dd")
```

```
LblTanggal.FontBold = True
```

```
LblTanggal.Alignment = vbCenter
```

```
LblTanggal.FontSize = 12
```

```
End Sub
```

Form laporan

```
Dim Prn As New PageSet.PrinterControl
```

```
Private Sub CmdEnd_Click()  
Unload Me  
End Sub
```

```
Private Sub Command1_Click()  
If Option1 = True Then  
    Prn.ChngOrientationPortrait 'Rubah menjadi Portrait  
Else  
    Prn.ChngOrientationLandscape 'Rubah menjadi Landscape  
End If  
DataReport2.LeftMargin = 10 'mengatur margin kiri  
DataReport2.RightMargin = 10 'mengatur margin kanan  
DataReport2.Show 'menampilkan data Report  
End Sub
```

```
Private Sub Form_Unload(Cancel As Integer)  
Prn.ResetOrientation 'Mengembalikan default printer  
End Sub
```