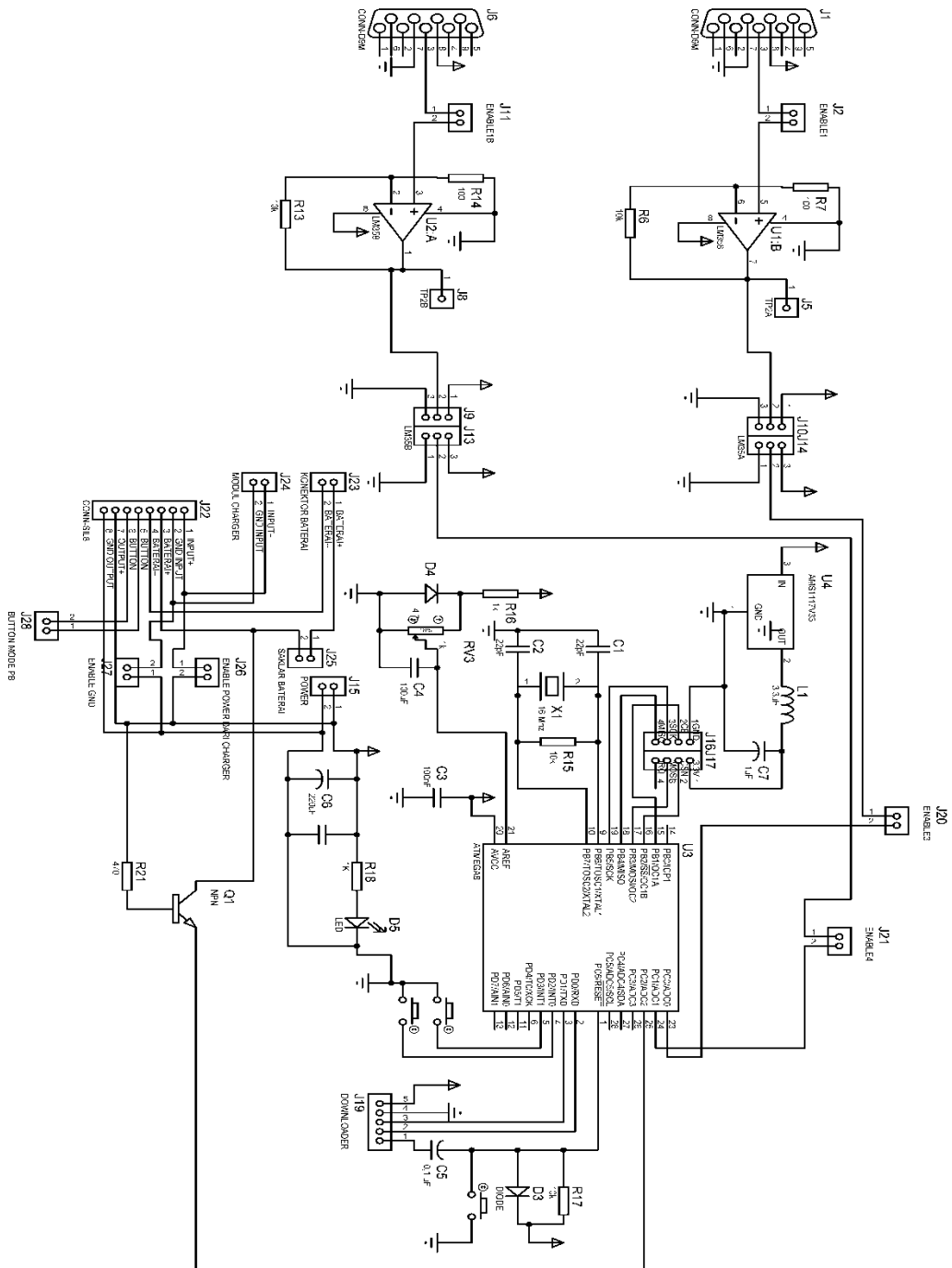


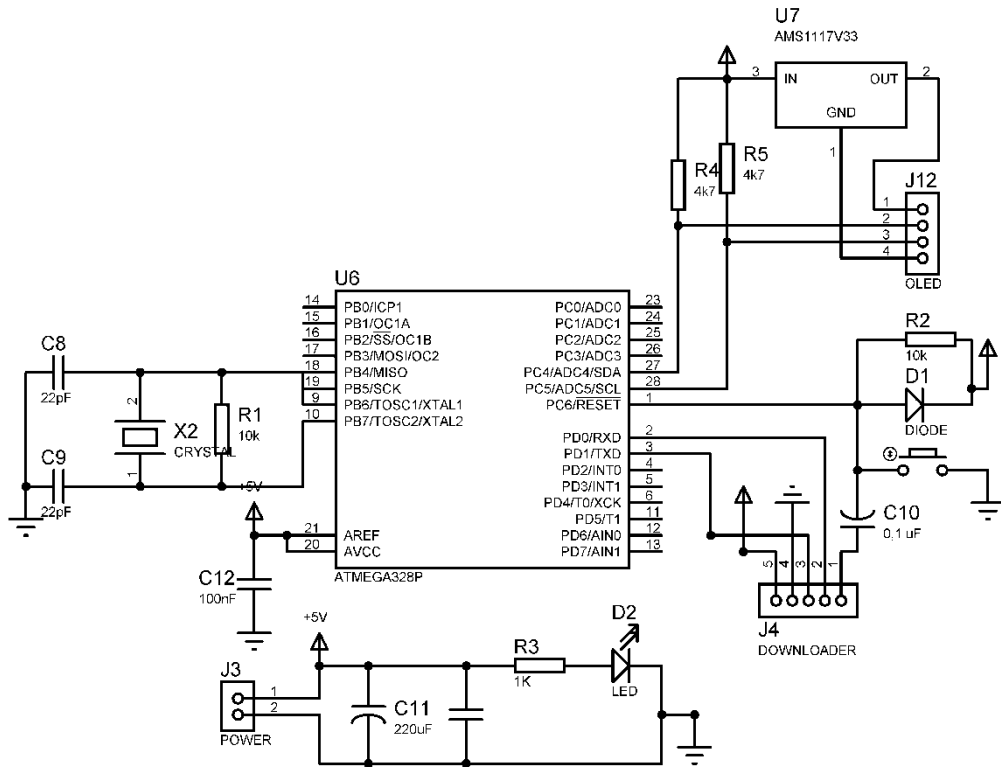
LAMPIRAN

Lampiran 1

Rangkaian Keseluruhan Pada Modul Pengirim




Rangkaian Keseluruhan Pada Blok Penerima



Lampiran 2

Standart Operasional Prosedur:

1. Jalankan Software Monitoring Suhu Tubuh Manusia pada Personal Computer (PC).
2. Isi Form sesuai ketentuan, kemudian setting Interval Plotting dan Mode.
3. Koneksikan modul receiver ke PC, kemudian setting PORT yang sesuai modul receiver.
4. Tekan tombol “Mulai Baca Data”.
5. Tekan tombol “Mulai” untuk memulai monitoring data.
6. Pasang sensor suhu 1 dan sensor suhu 2 di modul transmitter.
7. Nyalakan modul transmitter dengan memindah posisi saklar dari posisi OFF ke posisi ON, kemudian tekan tombol “ON”.
8. Pasang sensor suhu ke tubuh (bagian aksila/ketiak) orang yang ingin dimonitor suhu tubuhnya.
9. Pilih mode manual/otomatis.
10. Jika menggunakan mode manual, maka tekan tombol “kirim” untuk mengirimkan data.
11. Data berhasil dikirim jika status kirim menunjukkan status “OK”, dan “NO” jika data gagal dikirim.
12. Pindah posisi saklar dari posisi “ON” ke posisi “OFF” untuk mematikan modul transmitter.
13. Tekan tombol  Software Monitoring Suhu Tubuh Manusia jika ingin menutupnya.
14. Charger baterai dengan adaptor 5 volt dan micro USB jika voltase baterai kurang dari atau sama dengan 3.2 Volt.

Lampiran 3

Program Arduino Uno Pengirim

```
#include <SPI.h>
#include <nRF24L01.h>
#include <RF24.h>

//String senddata_suhu1,senddata_suhu2;
float suhu1,suhu2,baterai;
String suhu1_string, suhu2_string, baterai_string,
indikasi_kirim, indikasi_mode;
int suhu1_integer, suhu2_integer, baterai_integer;

RF24 radio(9, 10); // CE, CSN
const byte address[6] = "00001";
char temp[32];

const int numReadings1 = 10,numReadings2 = 10,numReadings3 = 10;
int
readings1[numReadings1],readings2[numReadings2],readings3[numReadings3]; // the readings from the analog input
int readIndex1 = 0,readIndex2 = 0,readIndex3 = 0;
// the index of the current reading
int total1 = 0,total2 = 0,total3 = 0; // the running total
int averagel, average2, average3 = 0; // the average

unsigned long interval=1500;
unsigned long previousMillis=0;

unsigned long interval2=1000;
unsigned long previousMillis2=0;

#define pinButton1 2 // kaki 2 arduino untuk Button 1
#define pinButton2 3 // kaki 3 arduino untuk Button 2

byte mode_button,kirim_button;

bool mode=0;

void setup(void)
{
  pinMode(pinButton1, INPUT_PULLUP);
  pinMode(pinButton2, INPUT_PULLUP);
  Serial.begin(4800);
  radio.begin();
  radio.openWritingPipe(address);
  radio.setPALevel(RF24_PA_MAX);
  radio.setDataRate(RF24_250KBPS);
  radio.stopListening();
  radio.enableDynamicPayloads();
  radio.powerUp();
}

void loop() {
```

```

//Smoothing pembacaan
Sensor+++++++
    // subtract the last reading
    total1 = total1 - readings1[readIndex1];
    total2 = total2 - readings2[readIndex2];
    total3 = total3 - readings3[readIndex3];
    // read from the sensor:
    readings1[readIndex1] = analogRead(A0);
    readings2[readIndex2] = analogRead(A1);
    readings3[readIndex3] = analogRead(A2);
    // add the reading to the total:
    total1 = total1 + readings1[readIndex1];
    total2 = total2 + readings2[readIndex2];
    total3 = total3 + readings3[readIndex3];
    // advance to the next position in the array:
    readIndex1 = readIndex1 + 1;
    readIndex2 = readIndex2 + 1;
    readIndex3 = readIndex3 + 1;
    // if we're at the end of the array...
    if (readIndex1 >= numReadings1)
    {
        // ...wrap around to the beginning:
        readIndex1 = 0;
    }
    if (readIndex2 >= numReadings2)
    {
        // ...wrap around to the beginning:
        readIndex2 = 0;
    }
    if (readIndex3 >= numReadings3)
    {
        // ...wrap around to the beginning:
        readIndex3 = 0;
    }
    // calculate the average:
    average1 = total1 / numReadings1;
    average2 = total2 / numReadings2;
    average3 = total3 / numReadings3;
//=====

//merubah ke float,integer,dan
string+++++++
    suhu1=(float)average1*4.5*13.235/1023*10;
    suhu1_integer = (int)suhu1;
    suhu1_string = (String)suhu1_integer;
    suhu2=(float)average2*4.5*13.235/1023*10;
    suhu2_integer = (int)suhu2;
    suhu2_string = (String)suhu2_integer;
    baterai = (float)average3*4.5/1023*100;
    baterai_integer = (int)baterai;
    baterai_string = (String)baterai_integer;
//=====

//pemilihan mode auto atau
manual+++++++
    mode_button = digitalRead(pinButton1);
    if(!mode_button)

```

```

    {
        mode=!mode;
        if(mode==1){indikasi_mode="C";}
        else{indikasi_mode="D";}
        delay(250);
    }
//=====

//perintah kirim pd mode
manual+++++++
    kirim_button = digitalRead(pinButton2);
    if(mode!=1)
    {
        if(!kirim_button)
        {
            kirim_nrf24l01();
            delay(500);
        }
    }
//=====
//kirim data ke OLED setiap 1
detik+++++++
    unsigned long currentMillis = millis();
    if ((unsigned long)(currentMillis - previousMillis) >=
interval)
    {
        String kirim =
        "*" + suhu1_string + ", " + suhu2_string + ", " + baterai_string + ", " + indikas
i_kirim + ", " + indikasi_mode + "#" + "\n";
        Serial.print(kirim);
        previousMillis = millis();
    }
//=====
//kirim data melalui NRF24L01 ke
receiver+++++++
    unsigned long currentMillis2 = millis();
    if ((unsigned long)(currentMillis2 - previousMillis2) >=
interval2)
    {
        if(mode==1)
        {
            kirim_nrf24l01();//memanggil fungsi pengiriman nrf24l01
        }
        previousMillis2 = millis();
    }
//=====
delay(1);
}

```

Program Arduino Uno Pengirim

```
void kirim_nrf24101()
{
//mengirim data suhu 1 melalui nrf2410
+++++
String send_data=suhu1_string+"A"+"|";
send_data.toCharArray(temp,32);
radio.powerUp();
radio.write(&temp, sizeof(temp));
bool ok1 = radio.write(&temp, sizeof(temp));
if(ok1){indikasi_kirim="A";}
else{indikasi_kirim="B";}
delay(100);
for(int i=0;i<32;i++)
{
temp[i]="";//mengosongkan karakter di variabel array temp
}
//=====
//mengirim data suhu 1 melalui nrf24101
+++++
send_data=suhu2_string+"B"+"|";
send_data.toCharArray(temp,32);
radio.powerUp();
radio.write(&temp, sizeof(temp));
ok1 = radio.write(&temp, sizeof(temp));
if(ok1){indikasi_kirim="A";}
else{indikasi_kirim="B";}
delay(100);
for(int i=0;i<32;i++)
{
temp[i]="";//mengosongkan karakter di variabel array temp
}
//=====
}
```

Program Arduino Uno Penerima

```
#include <SPI.h>//memasukkan library SPI
#include <nRF24L01.h>//memasukkan library nrf24l01
#include <RF24.h>//memasukkan library RF24

char text[32] = ""; //variabel array text dengan nilai awal kosong
String data;

RF24 radio(9, 10); // CE, CSN
const byte address[][6] = {"00001"};
void setup() {
//setting baud rate
+++++
  Serial.begin(38400);
//=====
//Setting NRF24L0
+++++
  radio.begin();
  radio.openReadingPipe(1, address[0]);
  radio.setPALevel(RF24_PA_MAX);
  radio.setDataRate(RF24_250KBPS);
  radio.startListening();
  radio.enableDynamicPayloads();
  radio.powerUp();
//=====
}
void loop() {
//mulai membuka saluran 1 dengan alamat 0 dan mulai membaca
data+++++
radio.openReadingPipe(1, address[0]);
while (radio.available())
{
  radio.read(&text, sizeof(text));
  data = text;
  Serial.print(data);
  for(int i=0;i<32;i++)
  {
    text[i]="";
  }
  delay(200);
}
}
```

Program Tampilan OLED

```
//memasukkan library
#include <Arduino.h>
#include <Wire.h>
#include <MicroLCD.h>
//=====
```



```

//memasukkan setting LCD
OLED+++++++
+++++++
LCD_SSD1306 lcd; /* for SSD1306 OLED module */
//=====================================================

//deklarasi
variabel+++++++
String dataIn;
String dt[10];
int i;
float suhu1,suhu2;
float baterai;
boolean parsing=false;
String indikasi_kirim,indikasi_mode;
bool a=false,b=false;
//=====================================================
void setup() {
    Serial.begin(4800); //memulai komunikasi serial dengan baud
    rate 4800
    lcd.begin(); //memulai OLED
    dataIn=""; //mengosongkan variabel dataIn
}

void loop() {

//membaca data dari arduino utama
+++++++
    if(Serial.available()>0)
    {
        char inChar = (char)Serial.read();
        dataIn += inChar;
        if (inChar == '\n') {
            parsing = true;
        }
    }
    if(parsing)
    {
        parsingData();
        parsing=false;
        dataIn="";
    }
    //=====
//konversi dari integer ke float
+++++++
    suhu1=(float)dt[0].toInt()/10;
    suhu2=(float)dt[1].toInt()/10;
    baterai = (float)dt[2].toInt()/100;
    //=====

//menampilkan nilai suhu
1+++++++
    lcd.setCursor(3, 0);
    lcd.setFontSize(FONT_SIZE_MEDIUM);
    lcd.print("Suhu 1: ");
    lcd.print(suhu1,1);

```

```

//=====
//menampilkan nilai suhu
2+++++++
+++++++
lcd.setCursor(3, 2);
lcd.setFontSize(FONT_SIZE_MEDIUM);
lcd.print("Suhu 2: ");
lcd.print(suhu2,1);
//=====

//menampilkan status
baterai+++++++
lcd.setCursor(3, 5);
lcd.setFontSize(FONT_SIZE_SMALL);
lcd.print("Status Baterai:");
lcd.print(baterai,2);
//=====
//mengambil nilai indikator kirim dan
mode+++++++
indikasi_kirim = dt[3];
indikasi_mode = dt[4];
//=====

//menampilkan teks status
kirim+++++++
+++++++
lcd.setCursor(3, 6);
lcd.setFontSize(FONT_SIZE_SMALL);
lcd.print("Status Kirim: ");
//=====

//menampilkan teks
mode+++++++
lcd.setCursor(3, 7);
lcd.setFontSize(FONT_SIZE_SMALL);
lcd.print("Mode:");
//=====
//kirim char 'A' dan 'B' untuk status kirim
OK/NO+++++++
+
  if(indikasi_kirim=="A")
  {
    lcd.setCursor(3, 6);
    lcd.setFontSize(FONT_SIZE_SMALL);
    lcd.print("Status Kirim: OK");
  }
  else if(indikasi_kirim=="B")
  {
    lcd.setCursor(3, 6);
    lcd.setFontSize(FONT_SIZE_SMALL);
    lcd.print("Status Kirim: NO");
  }
//=====

//kirim Char 'C' dan 'D' untuk status mode
auto/manual+++++++

```

```

if(indikasi_mode=="C"&&a==false)
{
  lcd.clear();
  a=true;b=false;
  lcd.setCursor(38, 7);
  lcd.setFontSize(FONT_SIZE_SMALL);
  lcd.print("OTOMATIS");
}
else if(indikasi_mode=="D"&&b==false)
{
  lcd.clear();
  a=false;b=true;
  lcd.setCursor(38, 7);
  lcd.setFontSize(FONT_SIZE_SMALL);
  lcd.print("MANUAL");
}
//=====
}

```

Program Parsing Data pada OLED

```

void parsingData(){
int j=0;

//inisialisasi variabel, (reset isi variabel)
dt[j]="";
//proses parsing data
for(i=1;i<dataIn.length();i++){
//pengecekan tiap karakter dengan karakter (#) dan (,)
if ((dataIn[i] == '#') || (dataIn[i] == ','))
{
//increment variabel j, digunakan untuk merubah index array
penampung
j++;
dt[j]="";          //inisialisasi variabel array dt[j]
}
else
{
//proses tampung data saat pengecekan karakter selesai.
dt[j] = dt[j] + dataIn[i];
}}
}

```

Program Delphi Unit 1

```
unit Unit1;

interface

uses
  Winapi.Windows, Winapi.Messages, System.SysUtils,
  System.Variants, System.Classes, Vcl.Graphics,
  Vcl.Controls, Vcl.Forms, Vcl.Dialogs, Vcl.Tee.TeeGDIPlus,
  Vcl.StdCtrls, StrUtils,
  VCLTee.TeEngine, Vcl.ExtCtrls, VCLTee.TeeProcs, VCLTee.Chart,
  VCLTee.DBChart,
  Data.DB, Data.Win.ADODB, Vcl.Grids, Vcl.DBGrids, Vcl.ComCtrls,
  VCLTee.Series,
  CPort;

type
  TForm1 = class(TForm)
    GroupBox1: TGroupBox;
    Label1: TLabel;
    Label2: TLabel;
    Label3: TLabel;
    Label4: TLabel;
    Edit2: TEdit;
    RadioButton1: TRadioButton;
    RadioButton2: TRadioButton;
    Edit3: TEdit;
    GroupBox3: TGroupBox;
    Label7: TLabel;
    Label8: TLabel;
    GroupBox4: TGroupBox;
    Label9: TLabel;
    Label10: TLabel;
    ADOQuery1: TADOQuery;
    ADOConnection1: TADOConnection;
    DataSource1: TDataSource;
    Button1: TButton;
    Button2: TButton;
    ADOQuery1Nomor: TIntegerField;
    ADOQuery1Tanggal: TDateTimeField;
    ADOQuery1Waktu: TDateTimeField;
    ADOQuery1ID: TWideStringField;
    ADOQuery1Nama: TWideStringField;
    ADOQuery1Jenis_Kelamin: TWideStringField;
    ADOQuery1Suhu: TFloatField;
    ADOQuery1Nomor_Rekamedis: TWideStringField;
    DBChart1: TDBChart;
    Series1: TFastLineSeries;
    Edit1: TEdit;
    DBGrid1: TDBGrid;
    Label11: TLabel;
    Label12: TLabel;
    Timer1: TTimer;
    Label13: TLabel;
    Edit4: TEdit;
  end;
end;
```

```
Edit5: TEdit;
Edit6: TEdit;
Label14: TLabel;
Button3: TButton;
DateTimePicker1: TDateTimePicker;
GroupBox2: TGroupBox;
Label15: TLabel;
Label16: TLabel;
Label17: TLabel;
Label18: TLabel;
Label21: TLabel;
Label22: TLabel;
Edit8: TEdit;
RadioButton3: TRadioButton;
RadioButton4: TRadioButton;
Edit9: TEdit;
GroupBox5: TGroupBox;
Label23: TLabel;
Label24: TLabel;
Label25: TLabel;
GroupBox6: TGroupBox;
Label26: TLabel;
Label27: TLabel;
Label28: TLabel;
Button4: TButton;
Button5: TButton;
DBChart2: TDBChart;
DBGrid2: TDBGrid;
Series2: TFastLineSeries;
Edit7: TEdit;
Edit10: TEdit;
Edit11: TEdit;
Edit12: TEdit;
Button6: TButton;
DateTimePicker2: TDateTimePicker;
ADOQuery2: TADOQuery;
IntegerField1: TIntegerField;
DateTimeField1: TDateTimeField;
DateTimeField2: TDateTimeField;
WideStringField1: TWideStringField;
WideStringField2: TWideStringField;
WideStringField3: TWideStringField;
FloatField1: TFloatField;
WideStringField4: TWideStringField;
ADOConnection2: TADOConnection;
DataSource2: TDataSource;
Timer2: TTimer;
Label29: TLabel;
Label30: TLabel;
ComboBox1: TComboBox;
ComboBox2: TComboBox;
ComPort1: TComPort;
Button7: TButton;
Button8: TButton;
Edit13: TEdit;
Edit14: TEdit;
```

```

procedure FormCreate(Sender: TObject);
procedure Button1Click(Sender: TObject);
procedure Button2Click(Sender: TObject);
procedure Timer1Timer(Sender: TObject);
procedure Button3Click(Sender: TObject);
procedure Button6Click(Sender: TObject);
procedure Button5Click(Sender: TObject);
procedure Button4Click(Sender: TObject);
procedure Timer2Timer(Sender: TObject);
procedure RadioButton5Click(Sender: TObject);
procedure Button7Click(Sender: TObject);
procedure Button8Click(Sender: TObject);
procedure ComPort1RxChar(Sender: TObject; Count: Integer);
private
  { Private declarations }
  Manual          :Boolean;
  Otomatis        :Boolean;
  Stopped         :Boolean;      // are we in "loop" mode ?
  MaxPoints       :Integer;      // total points per Series
  ScrollPoints    :Integer;      // number of points to scroll
when filled
  hitung          :integer;
  detik           :integer;
  jam             :integer;
  menit           :integer;
  jumlahwaktu    :integer;

  Manual2        :Boolean;
  Otomatis2      :Boolean;
  Stopped2       :Boolean;      // are we in "loop" mode ?
  MaxPoints2     :Integer;      // total points per Series
  ScrollPoints2  :Integer;      // number of points to scroll
when filled
  hitung2        :integer;
  detik2         :integer;
  jam2           :integer;
  menit2         :integer;
  jumlahwaktu2   :integer;

  suhu1,nilai_tertinggil:real;
  tmp1,tmpMin1,tmpMax1 : Double;

  suhu2,nilai_tertinggi2:real;
  tmp2,tmpMin2,tmpMax2 : Double;

  kode_kirim_berhasil : String;
public
  { Public declarations }
end;

var
  Form1: TForm1;

implementation

{$R *.dfm}

```

```

uses Unit2, Unit3, Unit4, Unit5;

procedure TForm1.FormCreate(Sender: TObject);
begin
  inherited;
  Timer1.Enabled:=false;
  Timer2.Enabled:=false;

  ADOQuery1.Close;
  ADOQuery1.SQL.Clear;
  ADOQuery1.SQL.Add('SELECT *FROM table1 WHERE Nomor IN ( SELECT
  MAX(Nomor)FROM table1)');
  ADOQuery1.Open;
  if ADOQuery1.FieldName('Nomor').Text<>' ' then
  hitung:=strtoint(ADOQuery1.FieldName('Nomor').Text);
  ADOQuery1.Close;
  ADOQuery1.SQL.Clear;
  ADOQuery1.SQL.Add('SELECT * FROM table1');
  ADOQuery1.Open;

  ADOQuery2.Close;
  ADOQuery2.SQL.Clear;
  ADOQuery2.SQL.Add('SELECT *FROM table2 WHERE Nomor IN ( SELECT
  MAX(Nomor)FROM table2)');
  ADOQuery2.Open;
  if ADOQuery2.FieldName('Nomor').Text<>' ' then
  hitung2:=strtoint(ADOQuery2.FieldName('Nomor').Text);
  ADOQuery2.Close;
  ADOQuery2.SQL.Clear;
  ADOQuery2.SQL.Add('SELECT * FROM table2');
  ADOQuery2.Open;

  Stopped:=True;
  MaxPoints:=50;
  ScrollPoints:=1;
  detik:=0;
  jam:=0;
  menit:=0;
  jumlahwaktu:=0;

  Stopped2:=True;
  MaxPoints2:=50;
  ScrollPoints2:=1;
  detik2:=0;
  jam2:=0;
  menit2:=0;
  jumlahwaktu2:=0;
end;
procedure TForm1.RadioButton5Click(Sender: TObject);
begin

end;
////////////////////////////////////
procedure TForm1.Button1Click(Sender: TObject);
begin

```

```

if (RadioButton1.Checked or RadioButton2.Checked) and
(edit1.Text<>='')
and (edit2.Text<>='') and (edit3.Text<>='') and
(edit4.Text<>'Jam') and (edit4.Text<>='')
and (edit5.Text<>'Menit') and (edit5.Text<>='') and
(combobox1.Text<>='')
and (button8.Caption = 'Stop Baca Data') then
begin
if RadioButton1.Checked=true then RadioButton2.Enabled:=false;
if RadioButton2.Checked=true then RadioButton1.Enabled:=false;
if button1.Caption='Mulai' then
begin
jam:=(strtoint(edit4.Text))*3600;
menit:=(strtoint(edit5.Text))*60;
jumlahwaktu:=jam+menit;
edit6.Text:=inttostr(jumlahwaktu);
Button2.Enabled:=false;
button1.Caption:='Stop';
combobox1.Enabled:=false;
if (combobox1.Text='Otomatis') then
begin
Timer1.Enabled:=true;
Timer1.Interval:=1000;
end else Timer1.Enabled:=false;
end else if button1.Caption='Stop' then
begin
combobox1.Enabled:=false;
Timer1.Enabled:=false;
Button2.Enabled:=true;
RadioButton1.Enabled:=true;
RadioButton2.Enabled:=true;
button1.Caption:='Mulai';
combobox1.Enabled:=true;
end;
end
else
begin
MessageDlg('Silahkan lengkapi form
gan!', mtInformation, [mbok], 0);
end;
end;
////////////////////////////////////
procedure TForm1.Button2Click(Sender: TObject);
begin
form2.show;
end;
////////////////////////////////////
procedure TForm1.Button3Click(Sender: TObject);
begin
form3.show;
form1.Hide;
end;
////////////////////////////////////
procedure TForm1.Button4Click(Sender: TObject);
begin

```



```

if (RadioButton3.Checked or RadioButton4.Checked) and
(edit7.Text<>='')
and (edit8.Text<>='') and (edit9.Text<>='') and
(edit10.Text<>'Jam') and (edit10.Text<>='')
and (edit11.Text<>'Menit') and (edit11.Text<>='') and
(combobox2.Text<>='')
and (button8.Caption = 'Stop Baca Data') then
begin
if RadioButton3.Checked=true then RadioButton4.Enabled:=false;
if RadioButton4.Checked=true then RadioButton3.Enabled:=false;
if button4.Caption='Mulai' then
begin
jam2:=(strtoint(edit10.Text))*3600;
menit2:=(strtoint(edit11.Text))*60;
jumlahwaktu2:=jam2+menit2;
edit12.Text:=inttostr(jumlahwaktu2);
Button5.Enabled:=false;
button4.Caption:='Stop';
combobox2.Enabled:=false;
if (combobox2.Text='Otomatis') then
begin
Timer2.Enabled:=true;
Timer2.Interval:=1000;
end else Timer2.Enabled:=false;
end else if button4.Caption='Stop' then
begin
Timer2.Enabled:=false;
Button5.Enabled:=true;
RadioButton3.Enabled:=true;
RadioButton4.Enabled:=true;
button4.Caption:='Mulai';
combobox2.Enabled:=true;
end;
end
else
begin
MessageDlg('Silahkan lengkapi form
gan!', mtInformation, [mbok], 0);
end;
end;
////////////////////////////////////
procedure TForm1.Button5Click(Sender: TObject);
begin
form5.show;
end;
////////////////////////////////////
procedure TForm1.Button6Click(Sender: TObject);
begin
form4.show;
form1.Hide;
end;
procedure TForm1.Button7Click(Sender: TObject);
begin
comport1.ShowSetupDialog;
end;

```

```

procedure TForm1.Button8Click(Sender: TObject);
begin
if button8.Caption='Mulai Baca Data' then
begin
comport1.Open;
Button7.Enabled:=false;
button8.Caption:='Stop Baca Data';
end else if button8.Caption='Stop Baca Data' then
begin
comport1.Close;
button8.Caption:='Mulai Baca Data';
end;
end;

//Baca Serial
komunikasi////////////////////////////////////
procedure TForm1.ComPort1RxChar(Sender: TObject; Count:
Integer);
var
dataIn,karakter,serialbuffer,simpan_str,buff,data_A,data_B:Strin
g;
save_data: TStringList;
data_integerA,data_integerB:Integer;
begin
repeat
begin
comport1.ReadStr(simpan_str,1);
buff:=buff+simpan_str;
end;
until simpan_str='|';
dataIn:=buff;
buff:='';
karakter:=rightstr(dataIn,2);
if karakter='A|' then
begin
data_A:=LeftStr(dataIn,length(dataIn)-2);
if data_A<>' ' then
begin
kode_kirim_berhasil:='OK';
edit13.Text:=data_A;
data_integerA:=strtoint(data_A);
suhul:=data_integerA/10;
//mencari nilai tertinggi 1
if(suhul>nilai_tertinggil) then nilai_tertinggil:=suhul;
end;
end;
if karakter='B|' then
begin
data_B:=LeftStr(dataIn,length(dataIn)-2);
if data_b<>' ' then
begin
kode_kirim_berhasil:='OK';
edit14.Text:=data_B;
data_integerB:=strtoint(data_B);
suhu2:=data_integerB/10;
//mencari nilai tertinggi 1

```

```

        if(suhu2>nilai_tertinggi2) then nilai_tertinggi2:=suhu2;
        end;
    end;

//+++++
if (combobox1.Text='Manual') and (button1.Caption='Stop') then
begin
    label7.Caption:=formatfloat('#,##0.0',suhul);
    label9.Caption:=formatfloat('#,##0.0',nilai_tertinggil);

//+++++
++++
    //Series1.XValues:=inttostr(hitung);
    if Series1.Count=0 then // First random point
        Series1.AddXY(0,suhul)
    else
    begin
        // Next random point
        Series1.AddXY(Series1.XValues.Last+1,suhul);//(10)-4.5);
        // Delete and Scroll points to the left
    end;

//+++++
    if Series1.Count>Pred(MaxPoints) then
    begin
        Series1.Delete(0,1);
        // Scroll horizontal bottom axis
        tmp1:=Series1.XValues.Last;
        DBChart1.BottomAxis.SetMinMax(tmp1-
MaxPoints+ScrollPoints,tmp1+ScrollPoints);
    end;

//+++++
    ADOquery1.Close;
    // Simpan ke Tabel Tes
    ADOquery1.SQL.Clear;
    //hitung:=ADOQuery1.Field;
    hitung:=hitung+1;
    ADOquery1.SQL.Add('Insert into table1');
    ADOquery1.SQL.Add('([Nomor], [Tanggal] , [Waktu], [ID],
[Nama], [Jenis_Kelamin], [Suhu],[Nomor_Rekamedis])');
    ADOquery1.SQL.Add('Values (:Nomor, :Tanggal, :Waktu, :ID,
:Nama, :Jenis_Kelamin, :Suhu, :Nomor_Rekamedis)');
    // Inisialisasi Nilai Data yang di Simpan
    ADOquery1.Parameters.ParamByName('Nomor').Value :=
inttostr(hitung);
    ADOquery1.Parameters.ParamByName('Tanggal').Value :=
DatetoStr(now()); //FormatDateTime
('hh:nn:ss',DateTimePicker1.Time);//('dd/mm/yyyy',DateTimePicker
1.Date);
    //ADOquery2.Parameters.ParamByName('Tanggal').Value :=
FormatDateTime ('dd/mm/yyyy',DateTimePicker1.Date);
    ADOquery1.Parameters.ParamByName('Waktu').Value :=
TimetoStr(now());
    ADOquery1.Parameters.ParamByName('ID').Value := Edit1.Text;
    ADOquery1.Parameters.ParamByName('Nama').Value := Edit2.Text;

```

```

    if RadioButton1.Checked then
    begin
        ADOquery1.Parameters.ParamByName('Jenis_Kelamin').Value :=
'L';
    end else if RadioButton2.Checked then
    begin
        ADOquery1.Parameters.ParamByName('Jenis_Kelamin').Value :=
'P';
    end;
        ADOquery1.Parameters.ParamByName('Suhu').Value :=
formatfloat('#,##0.0',suhu1);
        ADOquery1.Parameters.ParamByName('Nomor_Rekamedis').Value :=
edit3.Text;
        ADOquery1.ExecSQL;
        // Kembalikan Query
        ADOquery1.SQL.Text := 'Select * from table1';
        ADOquery1.Open;

//+++++
end;

//+++++
if (combobox2.Text='Manual') and (button4.Caption='Stop') then
begin
    label23.Caption:=formatfloat('#,##0.0',suhu2);
    label26.Caption:=formatfloat('#,##0.0',nilai_tertinggi2);

//+++++
++++
    //Series1.XValues:=inttostr(hitung);
    if Series2.Count=0 then // First random point
        Series2.AddXY(0,suhu2)
    else
    begin
        // Next random point
        Series2.AddXY(Series2.XValues.Last+1,suhu2);//(10)-4.5);
        // Delete and Scroll points to the left
    end;

//+++++
    if Series2.Count>Pred(MaxPoints) then
    begin
        Series2.Delete(0,1);
        // Scroll horizontal bottom axis
        tmp2:=Series2.XValues.Last;
        DBChart2.BottomAxis.SetMinMax(tmp2-
MaxPoints2+ScrollPoints2,tmp2+ScrollPoints2);
    end;

//+++++
        ADOquery2.Close;
        // Simpan ke Tabel Tes
        ADOquery2.SQL.Clear;
        //hitung:=ADOQuery1.Field;
        hitung2:=hitung2+1;
        ADOquery2.SQL.Add('Insert into table2');

```

```

ADOquery2.SQL.Add('([Nomor], [Tanggal] , [Waktu], [ID],
[Nama], [Jenis_Kelamin], [Suhu],[Nomor_Rekamedis])');
ADOquery2.SQL.Add('Values (:Nomor, :Tanggal, :Waktu, :ID,
:Nama, :Jenis_Kelamin, :Suhu, :Nomor_Rekamedis)');
// Inisialisasi Nilai Data yang di Simpan
ADOquery2.Parameters.ParamByName('Nomor').Value :=
inttostr(hitung2);
ADOquery2.Parameters.ParamByName('Tanggal').Value :=
DatetoStr(now()); //FormatDateTime
('hh:nn:ss',DateTimePicker1.Time); //('dd/mm/yyyy',DateTimePicker
1.Date);
//ADOquery2.Parameters.ParamByName('Tanggal').Value :=
FormatDateTime ('dd/mm/yyyy',DateTimePicker1.Date);
ADOquery2.Parameters.ParamByName('Waktu').Value :=
TimetoStr(now());
ADOquery2.Parameters.ParamByName('ID').Value := Edit7.Text;
ADOquery2.Parameters.ParamByName('Nama').Value := Edit8.Text;
if RadioButton3.Checked then
begin
ADOquery2.Parameters.ParamByName('Jenis_Kelamin').Value :=
'L';
end else if RadioButton4.Checked then
begin
ADOquery2.Parameters.ParamByName('Jenis_Kelamin').Value :=
'P';
end;
//ADOquery1.Parameters.ParamByName('Alamat').Value :=
Memol.Text;
ADOquery2.Parameters.ParamByName('Suhu').Value :=
formatfloat('#,##0.0',suhu2);
ADOquery2.Parameters.ParamByName('Nomor_Rekamedis').Value :=
edit9.Text;
ADOquery2.ExecSQL;
// Kembalikan Query
ADOquery2.SQL.Text := 'Select * from table2';
ADOquery2.Open;

//+++++
end;
end;
////////////////////////////////////
procedure TForm1.Timer1Timer(Sender: TObject);
begin
if(kode_kirim_berhasil='OK') then
begin
detik:=detik+1;
label14.Caption:=inttostr(detik);
if detik>=jumlahwaktu then
begin
label7.Caption:=formatfloat('#,##0.0',suhul);
label9.Caption:=formatfloat('#,##0.0',suhul);

//+++++
//Series1.XValues:=inttostr(hitung);
if Series1.Count=0 then // First random point
Series1.AddXY(0,suhul)

```

```

else
begin
    // Next random point
    Series1.AddXY(Series1.XValues.Last+1,suhul);//(10)-4.5);
    // Delete and Scroll points to the left
end;

//+++++
if Series1.Count>Pred(MaxPoints) then
begin
    Series1.Delete(0,1);
    // Scroll horizontal bottom axis
    tmp1:=Series1.XValues.Last;
    DBChart1.BottomAxis.SetMinMax(tmp1-
MaxPoints+ScrollPoints,tmp1+ScrollPoints);
end;

//+++++
ADOquery1.Close;
// Simpan ke Tabel Tes
ADOquery1.SQL.Clear;
//hitung:=ADOQuery1.Field;
hitung:=hitung+1;
ADOquery1.SQL.Add('Insert into table1');
ADOquery1.SQL.Add('([Nomor], [Tanggal] , [Waktu], [ID],
[Nama], [Jenis_Kelamin], [Suhu],[Nomor_Rekamedis])');
ADOquery1.SQL.Add('Values (:Nomor, :Tanggal, :Waktu, :ID,
:Nama, :Jenis_Kelamin, :Suhu, :Nomor_Rekamedis)');
// Inialisasi Nilai Data yang di Simpan
ADOquery1.Parameters.ParamByName('Nomor').Value :=
inttostr(hitung);
ADOquery1.Parameters.ParamByName('Tanggal').Value :=
DatetoStr(now()); //FormatDateTime
('hh:nn:ss',DateTimePicker1.Time); //('dd/mm/yyyy',DateTimePicker
1.Date);
//ADOquery2.Parameters.ParamByName('Tanggal').Value :=
FormatDateTime ('dd/mm/yyyy',DateTimePicker1.Date);
ADOquery1.Parameters.ParamByName('Waktu').Value :=
TimetoStr(now());
ADOquery1.Parameters.ParamByName('ID').Value := Edit1.Text;
ADOquery1.Parameters.ParamByName('Nama').Value := Edit2.Text;
if RadioButton1.Checked then
begin
    ADOquery1.Parameters.ParamByName('Jenis_Kelamin').Value :=
'L';
end else if RadioButton2.Checked then
begin
    ADOquery1.Parameters.ParamByName('Jenis_Kelamin').Value :=
'P';
end;
//ADOquery1.Parameters.ParamByName('Alamat').Value :=
Memol.Text;
ADOquery1.Parameters.ParamByName('Suhu').Value :=
formatfloat('#,##0.0',suhul);;
ADOquery1.Parameters.ParamByName('Nomor_Rekamedis').Value :=
edit3.Text;

```

```

ADOquery1.ExecSQL;
// Kembalikan Query
ADOquery1.SQL.Text := 'Select * from table1';
ADOquery1.Open;

//+++++
detik:=0;
end;
end;
kode_kirim_berhasil:='';
end;
////////////////////////////////////
procedure TForm1.Timer2Timer(Sender: TObject);
begin
if(kode_kirim_berhasil='OK') then
begin
detik2:=detik2+1;
label22.Caption:=inttostr(detik2);
if detik2>=jumlahwaktu2 then
begin
label23.Caption:=formatfloat('#,##0.0',suhu2);
label26.Caption:=formatfloat('#,##0.0',suhu2);

//+++++
//Series1.XValues:=inttostr(hitung);
if Series2.Count=0 then // First random point
Series2.AddXY(0,suhu2)
else
begin
// Next random point
Series2.AddXY(Series2.XValues.Last+1,suhu2);//(10)-4.5);
// Delete and Scroll points to the left
end;

//+++++
if Series2.Count>Pred(MaxPoints) then
begin
Series2.Delete(0,1);
// Scroll horizontal bottom axis
tmp2:=Series2.XValues.Last;
DBChart2.BottomAxis.SetMinMax(tmp2-
MaxPoints2+ScrollPoints2,tmp2+ScrollPoints2);
end;

//+++++
ADOquery2.Close;
// Simpan ke Tabel Tes
ADOquery2.SQL.Clear;
//hitung:=ADOQuery1.Field;
hitung2:=hitung2+1;
ADOquery2.SQL.Add('Insert into table2');
ADOquery2.SQL.Add('([Nomor], [Tanggal] , [Waktu], [ID],
[Nama], [Jenis_Kelamin], [Suhu],[Nomor_Rekamedis])');
ADOquery2.SQL.Add('Values (:Nomor, :Tanggal, :Waktu, :ID,
:Nama, :Jenis_Kelamin, :Suhu, :Nomor_Rekamedis)');
// Inisialisasi Nilai Data yang di Simpan

```

```

    ADOquery2.Parameters.ParamByName('Nomor').Value :=
inttostr(hitung2);
    ADOquery2.Parameters.ParamByName('Tanggal').Value :=
DatetoStr(now()); //FormatDateTime
('hh:nn:ss',DateTimePicker1.Time); // ('dd/mm/yyyy',DateTimePicker
1.Date);
    //ADOquery2.Parameters.ParamByName('Tanggal').Value :=
FormatDateTime ('dd/mm/yyyy',DateTimePicker1.Date);
    ADOquery2.Parameters.ParamByName('Waktu').Value :=
TimetoStr(now());
    ADOquery2.Parameters.ParamByName('ID').Value := Edit7.Text;
    ADOquery2.Parameters.ParamByName('Nama').Value := Edit8.Text;
    if RadioButton3.Checked then
    begin
        ADOquery2.Parameters.ParamByName('Jenis_Kelamin').Value :=
'L';
    end else if RadioButton4.Checked then
    begin
        ADOquery2.Parameters.ParamByName('Jenis_Kelamin').Value :=
'P';
    end;
    //ADOquery1.Parameters.ParamByName('Alamat').Value :=
Memor1.Text;
    ADOquery2.Parameters.ParamByName('Suhu').Value :=
formatfloat('#,##0.0',suhu2);
    ADOquery2.Parameters.ParamByName('Nomor_Rekamedis').Value :=
edit9.Text;
    ADOquery2.ExecSQL;
    // Kembalikan Query
    ADOquery2.SQL.Text := 'Select * from table2';
    ADOquery2.Open;

//+++++
detik2:=0;
end;
end;
kode_kirim_berhasil:='';
end;

end.

```


Program Delphi Unit 2

```
unit Unit2;

interface

uses
  Winapi.Windows, Winapi.Messages, System.SysUtils,
  System.Variants, System.Classes, Vcl.Graphics,
  Vcl.Controls, Vcl.Forms, Vcl.Dialogs, Vcl.StdCtrls;

type
  TForm2 = class(TForm)
    Label1: TLabel;
    Edit1: TEdit;
    Button1: TButton;
    procedure Button1Click(Sender: TObject);
  private
    { Private declarations }
  public
    { Public declarations }
  end;

var
  Form2: TForm2;

implementation

{$R *.dfm}

uses Unit1;

procedure TForm2.Button1Click(Sender: TObject);
var
  SQL:String;
begin
  if form2.edit1.text='12345' then
    begin
      if(application.MessageBox('Apakah agan yakin ingin
menghapus?', 'Konfirmasi', MB_YesNo)=ID_yes) then
        begin
          SQL := 'DELETE FROM [table1] list';//--> menghapus
seluruhnya
          form1.ADOquery1.Close;
          form1.ADOquery1.SQL.Clear;
          form1.ADOquery1.SQL.Add(SQL);
          form1.ADOquery1.ExecSQL;
          // Kembalikan Query
          form1.ADOquery1.SQL.Text := 'Select * from [table1]';
          form1.ADOquery1.Open;
          showmessage('Berhasil dihapus gan!');
          form2.Close;
        end;
      end;
    else
      begin
```

```

    messagedlg('Maaf PIN Anda salah!',mtinformation,[mbok],0);
    form2.edit1.Clear;
    form2.setfocus;
end;
end;
end.

```

Program Delphi Unit 3

```

unit Unit3;

interface

uses
    Winapi.Windows, Winapi.Messages, System.SysUtils,
    System.Variants, System.Classes, Vcl.Graphics,
    Vcl.Controls, Vcl.Forms, Vcl.Dialogs, VclTee.TeeGDIPlus,
    Data.DB,
    Vcl.StdCtrls, Vcl.ComCtrls, Data.Win.ADODB, Vcl.Grids,
    Vcl.DBGrids,
    VCLTee.TeEngine, VCLTee.Series, Vcl.ExtCtrls, VCLTee.TeeProcs,
    VCLTee.Chart,
    VCLTee.DBChart;

type
    TForm3 = class(TForm)
        DBChart1: TDBChart;
        Series1: TFastLineSeries;
        DataSource1: TDataSource;
        ADOConnection1: TADOConnection;
        GroupBox1: TGroupBox;
        DBGrid1: TDBGrid;
        GroupBox2: TGroupBox;
        Label1: TLabel;
        Label3: TLabel;
        Label2: TLabel;
        Label4: TLabel;
        Edit1: TEdit;
        DateTimePicker1: TDateTimePicker;
        DateTimePicker2: TDateTimePicker;
        Edit2: TEdit;
        Button2: TButton;
        Button1: TButton;
        ADOQuery1: TADOQuery;
        ADOQuery1Nomor: TIntegerField;
        ADOQuery1Tanggal: TDateTimeField;
        ADOQuery1Waktu: TDateTimeField;
        ADOQuery1ID: TWideStringField;
        ADOQuery1Nama: TWideStringField;
        ADOQuery1Jenis_Kelamin: TWideStringField;
        ADOQuery1Suhu: TFloatField;
        ADOQuery1Nomor_Rekamedis: TWideStringField;
        Label5: TLabel;
        Edit3: TEdit;
    procedure Button1Click(Sender: TObject);
    end;

```

```

    procedure FormClose(Sender: TObject; var Action:
TCloseAction);
    procedure Edit2Click(Sender: TObject);
    procedure FormClick(Sender: TObject);
    procedure Edit1Click(Sender: TObject);
    procedure Button2Click(Sender: TObject);
    procedure FormCreate(Sender: TObject);
private
    { Private declarations }
public
    { Public declarations }
end;

var
    Form3: TForm3;

implementation

{$R *.dfm}
uses Unit1;

procedure TForm3.Button1Click(Sender: TObject);
begin
if edit3.Text<>' ' then
begin
ADOQuery1.Close;
ADOQuery1.SQL.Clear;
ADOQuery1.SQL.Add('SELECT * FROM [table1] WHERE (Tanggal BETWEEN
(:tgl1) AND (:tgl2)) AND (Waktu BETWEEN (:waktu1) AND (:waktu2))
AND (ID=:id) ORDER BY Nomor ASC');
ADOQuery1.Parameters.ParamByName('tgl1').Value:=FormatDateTime('
mm/dd/yyyy',DateTimePicker1.Date);
ADOQuery1.Parameters.ParamByName('tgl2').Value:=FormatDateTime('
mm/dd/yyyy',DateTimePicker2.Date);
ADOQuery1.Parameters.ParamByName('waktu1').Value:=edit1.Text;
ADOQuery1.Parameters.ParamByName('waktu2').Value:=edit2.Text;
ADOQuery1.Parameters.ParamByName('id').Value:=Edit3.Text;
ADOQuery1.Open;
DBchart1.RefreshData;
end
else
begin
ADOQuery1.Close;
ADOQuery1.SQL.Clear;
ADOQuery1.SQL.Add('SELECT * FROM [table1] WHERE (Tanggal BETWEEN
(:tgl1) AND (:tgl2)) AND (Waktu BETWEEN (:waktu1) AND (:waktu2))
ORDER BY Nomor ASC');
ADOQuery1.Parameters.ParamByName('tgl1').Value:=FormatDateTime('
mm/dd/yyyy',DateTimePicker1.Date);
ADOQuery1.Parameters.ParamByName('tgl2').Value:=FormatDateTime('
mm/dd/yyyy',DateTimePicker2.Date);
ADOQuery1.Parameters.ParamByName('waktu1').Value:=edit1.Text;
ADOQuery1.Parameters.ParamByName('waktu2').Value:=edit2.Text;
ADOQuery1.Open;
DBchart1.RefreshData;
end;
end;

```

```

end;

procedure TForm3.Button2Click(Sender: TObject);
begin
ADOQuery1.Close;
ADOQuery1.SQL.Clear;
ADOQuery1.SQL.Add('SELECT * FROM [table1]');
ADOQuery1.Open;
end;

procedure TForm3.Edit1Click(Sender: TObject);
begin
if(edit1.Text='hh:mm:ss') then edit1.Text:='';
if(edit2.Text='')then edit2.Text:='hh:mm:ss';
end;

procedure TForm3.Edit2Click(Sender: TObject);
begin
if(edit2.Text='hh:mm:ss') then edit2.Text:='';
if(edit1.Text='')then edit1.Text:='hh:mm:ss';
end;

procedure TForm3.FormClick(Sender: TObject);
begin
if(edit1.Text='') then edit1.Text:='hh:mm:ss';
if(edit2.Text='') then edit2.Text:='hh:mm:ss';
end;

procedure TForm3.FormClose(Sender: TObject; var Action:
TCloseAction);
begin
form1.show;
end;

procedure TForm3.FormCreate(Sender: TObject);
begin
ADOQuery1.Open;
end;

end.

```

Program Delphi Unit 4

```

unit Unit4;

interface

uses
  Winapi.Windows, Winapi.Messages, System.SysUtils,
  System.Variants, System.Classes, Vcl.Graphics,
  Vcl.Controls, Vcl.Forms, Vcl.Dialogs, VclTee.TeeGDIPlus,
  Data.DB,
  Data.Win.ADODB, Vcl.StdCtrls, Vcl.ComCtrls, Vcl.Grids,
  Vcl.DBGrids,

```

```

    VCLTee.TeEngine, VCLTee.Series, Vcl.ExtCtrls, VCLTee.TeeProcs,
    VCLTee.Chart,
    VCLTee.DBChart;

type
  TForm4 = class(TForm)
    DBChart1: TDBChart;
    Series1: TFastLineSeries;
    GroupBox1: TGroupBox;
    DBGrid1: TDBGrid;
    GroupBox2: TGroupBox;
    Label1: TLabel;
    Label3: TLabel;
    Label2: TLabel;
    Label4: TLabel;
    Edit1: TEdit;
    DateTimePicker1: TDateTimePicker;
    DateTimePicker2: TDateTimePicker;
    Edit2: TEdit;
    Button2: TButton;
    Button1: TButton;
    DataSource1: TDataSource;
    ADOConnection1: TADOConnection;
    ADOQuery1: TADOQuery;
    ADOQuery1Nomor: TIntegerField;
    ADOQuery1Tanggal: TDateTimeField;
    ADOQuery1Waktu: TDateTimeField;
    ADOQuery1ID: TWideStringField;
    ADOQuery1Nama: TWideStringField;
    ADOQuery1Jenis_Kelamin: TWideStringField;
    ADOQuery1Suhu: TFloatField;
    ADOQuery1Nomor_Rekamedis: TWideStringField;
    Label5: TLabel;
    Edit3: TEdit;
    procedure FormClose(Sender: TObject; var Action:
    TCloseAction);
    procedure Button2Click(Sender: TObject);
    procedure Button1Click(Sender: TObject);
    procedure Edit1Click(Sender: TObject);
    procedure Edit2Click(Sender: TObject);
    procedure FormClick(Sender: TObject);
    procedure FormCreate(Sender: TObject);
  private
    { Private declarations }
  public
    { Public declarations }
  end;

var
  Form4: TForm4;

implementation
{$R *.dfm}

uses Unit1;

```

```

procedure TForm4.Button1Click(Sender: TObject);
begin
if edit3.Text<>' ' then
begin
ADOQuery1.Close;
ADOQuery1.SQL.Clear;
ADOQuery1.SQL.Add('SELECT * FROM [table2] WHERE (Tanggal BETWEEN
(:tgl1) AND (:tgl2)) AND (Waktu BETWEEN (:waktu1) AND (:waktu2))
AND (ID=:id) ORDER BY Nomor ASC');
ADOQuery1.Parameters.ParamByName('tgl1').Value:=FormatDateTime('
mm/dd/yyyy',DateTimePicker1.Date);
ADOQuery1.Parameters.ParamByName('tgl2').Value:=FormatDateTime('
mm/dd/yyyy',DateTimePicker2.Date);
ADOQuery1.Parameters.ParamByName('waktu1').Value:=edit1.Text;
ADOQuery1.Parameters.ParamByName('waktu2').Value:=edit2.Text;
ADOQuery1.Parameters.ParamByName('id').Value:=Edit3.Text;
ADOQuery1.Open;
DBchart1.RefreshData;
end
else
begin
ADOQuery1.Close;
ADOQuery1.SQL.Clear;
ADOQuery1.SQL.Add('SELECT * FROM [table2] WHERE (Tanggal BETWEEN
(:tgl1) AND (:tgl2)) AND (Waktu BETWEEN (:waktu1) AND (:waktu2))
ORDER BY Nomor ASC');
ADOQuery1.Parameters.ParamByName('tgl1').Value:=FormatDateTime('
mm/dd/yyyy',DateTimePicker1.Date);
ADOQuery1.Parameters.ParamByName('tgl2').Value:=FormatDateTime('
mm/dd/yyyy',DateTimePicker2.Date);
ADOQuery1.Parameters.ParamByName('waktu1').Value:=edit1.Text;
ADOQuery1.Parameters.ParamByName('waktu2').Value:=edit2.Text;
ADOQuery1.Open;
DBchart1.RefreshData;
end;
end;

procedure TForm4.Button2Click(Sender: TObject);
begin
ADOQuery1.Close;
ADOQuery1.SQL.Clear;
ADOQuery1.SQL.Add('SELECT * FROM [table2]');
ADOQuery1.Open;
end;

procedure TForm4.Edit1Click(Sender: TObject);
begin
if(edit1.Text='hh:mm:ss') then edit1.Text:='';
if(edit2.Text='')then edit2.Text:='hh:mm:ss';
end;

procedure TForm4.Edit2Click(Sender: TObject);
begin
if(edit2.Text='hh:mm:ss') then edit2.Text:='';
if(edit1.Text='')then edit1.Text:='hh:mm:ss';

```

```

end;

procedure TForm4.FormClick(Sender: TObject);
begin
if(edit1.Text='') then edit1.Text:='hh:mm:ss';
if(edit2.Text='') then edit2.Text:='hh:mm:ss';
end;

procedure TForm4.FormClose(Sender: TObject; var Action:
TCloseAction);
begin
form1.Show;
end;

procedure TForm4.FormCreate(Sender: TObject);
begin
ADOQuery1.Open;
end;

end.

```

Program Delphi Unit 5

```

unit Unit5;

interface

uses
  Winapi.Windows, Winapi.Messages, System.SysUtils,
  System.Variants, System.Classes, Vcl.Graphics,
  Vcl.Controls, Vcl.Forms, Vcl.Dialogs, Vcl.StdCtrls;

type
  TForm5 = class(TForm)
    Label1: TLabel;
    Edit1: TEdit;
    Button1: TButton;
    procedure Button1Click(Sender: TObject);
  private
    { Private declarations }
  public
    { Public declarations }
  end;

var
  Form5: TForm5;

implementation

{$R *.dfm}
uses Unit1;

procedure TForm5.Button1Click(Sender: TObject);
Var
SQL:String;

```

```
begin
if form5.edit1.text='12345' then
  begin
  if(application.MessageBox('Apakah agan yakin ingin
menghapus?','Konfirmasi',MB_YesNo)=ID_yes) then
    begin
      SQL := 'DELETE FROM [table2] list';/--> menghapus
seluruhnya
      form1.ADOquery2.Close;
      form1.ADOquery2.SQL.Clear;
      form1.ADOquery2.SQL.Add(SQL);
      form1.ADOquery2.ExecSQL;
      // Kembalikan Query
      form1.ADOquery2.SQL.Text := 'Select * from [table2]';
      form1.ADOquery2.Open;
      showmessage('Berhasil dihapus gan!');
      form5.Close;
    end;
  end
else
  begin
    messagedlg('Maaf PIN Anda salah!',mtinformation,[mbok],0);
    form5.edit1.Clear;
    form5.setfocus;
  end;
end;
end.
```