

LAMPIRAN

LAMPIRAN 1. Program Arduino

```
#include <OneWire.h>
#include <DallasTemperature.h>
#define ONE_WIRE_BUS 2
#define USE_ARDUINO_INTERRUPTS true
#include <PulseSensorPlayground.h>

OneWire oneWire(ONE_WIRE_BUS);
DallasTemperature sensorSuhu(&oneWire);
const int PulseWire = 0;
const int pinLED = 13;
int Threshold = 550;
int incomingByte = 0;
int datain;

float suhu1;

PulseSensorPlayground pulseSensor;

void setup(void)
{
  Serial.begin(9600);

  pulseSensor.analogInput(PulseWire);
  pulseSensor.blinkOnPulse(pinLED);
  pulseSensor.setThreshold(Threshold);

  pulseSensor.begin();
```

```

    sensorSuhu.begin();

    delay(20);
}

void loop()

{int BPM = pulseSensor.getBeatsPerMinute();
  if (pulseSensor.sawStartOfBeat()) {

Serial.print((int)BPM);
  Serial.print("-");

}
  delay(20);

  suhu1 = ambilSuhu();
  Serial.print((int)suhu1);
  Serial.print("-");
  delay(30);

  incomingByte = Serial.read();
  if (incomingByte == '1')
  {
    if (BPM < 60 && suhu1 < 35){
Serial.print("ANDA MENGALAMI HIPOTERMIA");
  Serial.print("-");
  delay(30);}

    if (BPM > 100 && suhu1 <=35 ){
  Serial.print("DETAH JANTUNG TINGGI");

```

```
Serial.print("-");
delay(30);}
  if (BPM >100 && suhu1 > 37){
Serial.print("BERISTIRAHATLAH");
Serial.print("-");
  delay(30);}
if (BPM < 60){
Serial.print("DETAK JANTUNG LEMAH");
  Serial.print("-");
  delay(30);}
if (suhu1 < 35 && BPM >= 70){
  Serial.print("SUHU TUBUH RENDAH");
  Serial.print("-");
  delay(30);}
if(suhu1 > 37){
  Serial.print("SUHU TUBUH TINGGI");
  Serial.print("-");
  delay(30);}
}
}

float ambilSuhu()
{
  sensorSuhu.requestTemperatures();
  float suhu = sensorSuhu.getTempCByIndex(0);
  return suhu;
}
```

Program MIT App Inventor

```

when ListPicker1 . BeforePicking
do
  set ListPicker1 . Elements to BluetoothClient1 . AddressesAndNames

when ListPicker1 . AfterPicking
do
  set ListPicker1 . Selection to call BluetoothClient1 . Connect
  address ListPicker1 . Selection
  if BluetoothClient1 . IsConnected
  then
    set Clock1 . TimerEnabled to true
    set Clock2 . TimerEnabled to true
    set ListPicker1 . Elements to BluetoothClient1 . AddressesAndNames
    set BPM . Visible to true
    set suhu1 . Visible to true
  if BluetoothClient1 . IsConnected
  then
    set ListPicker1 . Text to "CONNECTED"
    set ListPicker1 . BackgroundColor to yellow
  else
    set ListPicker1 . Text to "NOT CONNECTED"
    set ListPicker1 . BackgroundColor to red

initialize global data to create empty list

when Clock1 . Timer
do
  if BluetoothClient1 . IsConnected and call BluetoothClient1 . BytesAvailableToReceive > 0
  then
    set global data to split text call BluetoothClient1 . ReceiveText
    numberOfBytes call BluetoothClient1 . BytesAvailableToReceive
    at " "
    if length of list list get global data ≥ 1
    then
      set BPM . Text to select list item list get global data
      index 1
    if length of list list get global data ≥ 2
    then
      set suhu1 . Text to select list item list get global data
      index 2
    if length of list list get global data ≥ 3
    then
      set Label6 . Text to select list item list get global data
      index 3

when Button1 . Click
do
  call BluetoothClient1 . SendText
  text "1"
  call Notifier1 . ShowMessageDialog
  message join suhu1 . Text
  Label6 . Text
  title "PERINGATAN"
  buttonText "OKAY"
  
```





