Lampiran Program Teknik Budidaya Ikan dalam Ember (Budikdamber) Berbasis Internet Of Things (IoT)

```
#include <ESP8266WiFi.h>
#define BLYNK_PRINT Serial
#include <BlynkSimpleEsp8266.h>
#include <SimpleTimer.h>
#include <OneWire.h>
#include <Wire.h>
#include <DallasTemperature.h>
#define temp_sensor D4

char auth[] = "Kv8vNUvAoGKWwjJlHJpxH8TRKxjcoh31";

/* WiFi credentials */
char ssid[] = "Redmi";
char pass[] = "cindy5555";
float temperature = 0;
OneWire oneWirePin(temp_sensor);
DallasTemperature sensors(&oneWirePin);
SimpleTimer timer;

static float kekeruhan;
static float teg;

void getSendData()
{
  sensors.requestTemperatures();
  temperature = sensors.getTempCByIndex(0);
  Serial.print("Temperature is ");
  Serial.print(temperature);
```

```
int val =analogRead(A0);
teg = val*(3.3/1024);
kekeruhan =100.00-(teg/1.91)*100.00;
Serial.print (teg);
Serial.print ("        ");
Serial.print ("  Nilai Adc =");
Serial.print (val);
Serial.print ("     ");
Serial.print ("  Nilai Kekeruhan");
Serial.print (kekeruhan);
Serial.println("  NTU");
delay(100);
    if (kekeruhan <15 ) {
    digitalWrite(D3, HIGH);
    digitalWrite(D1, HIGH);
  }
  if (kekeruhan > 15) {
    digitalWrite(D3, LOW);
    digitalWrite(D1, LOW);
  }
 if (temperature >=26 && temperature<= 30) {
  digitalWrite(D2, HIGH);
  }
  if (temperature >= 30) {
    digitalWrite(D2, LOW);
  }
  Blynk.virtualWrite(V3, temperature); //virtual pin V3
  Blynk.virtualWrite(V2, kekeruhan); //virtual pin V3
  Blynk.virtualWrite(V4, teg); //virtual pin V3
  Blynk.virtualWrite(V1, val); //virtual pin V3
```

```arduino
}

void setup() {
  // put your setup code here, to run once:
 Serial.begin(115200);
  pinMode(D0, OUTPUT);
  pinMode(D1, OUTPUT);
  pinMode(D3, OUTPUT);
  pinMode(D2, OUTPUT);
  Blynk.begin(auth, ssid, pass);
  timer.setInterval(1000L, getSendData);

}

void loop() {
  // put your main code here, to run repeatedly:
  timer.run(); // Initiates SimpleTimer
  Blynk.run();
}
```