Listing Pemrograman

Command	**Keterangan**
#include <Wire.h> #include <LiquidCrystal_I2C.h> LiquidCrystal_I2C lcd(0x27, 16, 2);	#include <Wire.h> #include <LiquidCrystal_I2C.h> Digunakan untuk memanggil library dari LCD I2C
#define BLYNK_TEMPLATE_ID "TMPL0Z9i65gH" #define BLYNK_DEVICE_NAME "kontrol 1" #define BLYNK_FIRMWARE_VERSION "0.1.0" #define BLYNK_PRINT Serial #define APP_DEBUG	#define BLYNK_TEMPLATE_ID "TMPL0Z9i65gH" Deklarasi Blynk Template ID "TMPL0Z9i65gH" #define BLYNK_DEVICE_NAME "kontrol 1" Deklarasi Blynk Device Name "kontrol 1" #define BLYNK_FIRMWARE_VERSION "0.1.0" Deklarasi Blynk Firmware Version 0.1.0 #define BLYNK_PRINT Serial Untuk mengirim hasil pembacaan ke server blynk
int pinValue1; int pinValue2; int pinValue3;	Int digunakan untuk deklarasi variabel pin yang digunakan

int pinValue4;
 	
int pinValue5;
int pinValue6;
int relay1=D0;
int relay2=D6;
int relay3=D7;
int buzzer=D3;	

#define USE_NODE_MCU_BOARD #include "BlynkEdgent.h"	#define USE_NODE_MCU_BOARD Digunakan untuk mendeklarasikan penggunaan Board NodeMCU #include "BlynkEdgent.h" Digunakan untuk memanggil Library dari BlynkEdgent.h

BLYNK_WRITE(V1)
{
pinValue1 = param.asInt();
}
 	
BLYNK_WRITE(V2)
{
pinValue2 = param.asInt();
}
BLYNK_WRITE(V3)
{
pinValue3 = param.asInt();
}
BLYNK_WRITE(V4)
	Digunakan untuk membuat parameter pada blynk dan dihubungkan ke nodemcu

{
  pinValue4 = param.asInt();
}
 	
BLYNK_WRITE(V5)
{
  pinValue5 = param.asInt();
}
 	
BLYNK_WRITE(V6)
{
  pinValue6 = param.asInt();
}	

void setup()
{
  Serial.begin(115200);
  delay(100);
  pinMode (D5, INPUT);
  digitalWrite(D5, HIGH);
  lcd.begin();
  lcd.backlight();
 	
  pinMode(relay1,OUTPUT
  digitalWrite(relay1, HIGH);
  pinMode(relay2,OUTPUT);
  digitalWrite(relay2, HIGH);
  pinMode(relay3,OUTPUT);
  digitalWrite(relay3, HIGH);
  pinMode(buzzer,OUTPUT);
	void setup()
	Program yang akan dijalankan pertama kali

}
int counter15, counter20, counter25;
unsigned long timer1s = 0;
float counterup1s;	

void maju() {
 	
  digitalWrite(relay2, HIGH);
  digitalWrite(relay3, LOW);
 	
}
	Program ini digunakan untuk menjalankan *lienar actuator* turun

void mundur() {
 	
  digitalWrite(relay2, LOW);
  digitalWrite(relay3, HIGH);
 	
}
	Program ini digunakan untuk menjalankan *lienar actuator* naik

void stopmotor() {
 	
  digitalWrite(relay2, HIGH);
  digitalWrite(relay3, HIGH);
 	
}
	Program ini digunakan untuk menghentikan *linear actuator*

void loop() {
 	
  if (millis() - timer1s >= 1000) {
   timer1s = millis();
   if (counter15 >= 1) {
 	
     Blynk.logEvent("on");
	Program counting down, sesuai timer apa yang aktif

```
    Serial.println("counter aktif 15
menit");

    counter15 = counter15 - 1;//counter
bergerak
    lcd.setCursor(0, 0);
    lcd.print("timer 15 menit");
    Serial.println("LCD => timer 15
menit");
    lcd.setCursor(0, 1);
    lcd.print(counter15);
    lcd.print("    ");
    Serial.println("LCD => remaining " +
String(counter15));
   digitalWrite(relay1, LOW);

  }
  else if(counter15=0); {
    digitalWrite(relay1, HIGH);
    digitalWrite(buzzer,LOW);
  }

  }
  if (counter20 >= 1) {
    Blynk.logEvent("on");
    Serial.println("counter aktif 20
menit");
    counter20 = counter20 - 1;
    lcd.setCursor(0, 0);
    lcd.print("timer 20 menit");
```

```
    Serial.println("LCD => timer 20
menit");
    lcd.setCursor(0, 1);
    lcd.print(counter20);
    lcd.print("    ");
    Serial.println("LCD => remaining " +
String(counter20));
    digitalWrite(relay1, LOW);

  }
   else if(counter20=0); {
    digitalWrite(relay1, HIGH);
    digitalWrite(buzzer,LOW);
  }

  if (counter25 >= 1) {
    Blynk.logEvent("on");
    Serial.println("counter aktif 25
menit");
    counter25 = counter25 - 1;
    lcd.setCursor(0, 0);
    lcd.print("timer 25 menit");
    Serial.println("LCD => timer 25
menit");
    lcd.setCursor(0, 1);
    lcd.print(counter25);
    lcd.print("    ");
    Serial.println("LCD => remaining " +
String(counter25));
    digitalWrite(relay1, LOW);
  }
```

else if(counter25=0); {
digitalWrite(relay1, HIGH);
digitalWrite(buzzer,LOW);
}	

if (pinValue1 == HIGH) {
Serial.println(" trigger 15 menit");
counter15 = 15 * 60; // 15 menit (60*15)
counter20 = 0;
counter25 = 0;
}
 	
if (pinValue2 == HIGH) {
Serial.println(" trigger 20 menit");
counter20 = 20 * 60; // 20 menit (60*20);
counter15 = 0;
counter25 = 0;
 	
}
 	
if (pinValue3 == HIGH) {
Serial.println(" trigger 25 menit");
counter25 = 25 * 60; // 25 menit (60*25)
counter15 = 0;
counter20 = 0;
 	
}
 	
}
	Program mengaktifkan counter down

//== program reset counter
  if (digitalRead(D5) == LOW ||
(pinValue4 == HIGH)) {
  Serial.println(" Counter Reset >>
Stop");
  counter25 = 0;
  counter15 = 0;
  counter20 = 0;
  digitalWrite(relay1, HIGH);
 	
  lcd.setCursor(0, 0);
  lcd.print("Reset timer ");
  Serial.println("Sistem Stopped ");
  lcd.setCursor(0, 1);
  lcd.print("Sistem Stopped ");
  lcd.print(" ");
  delay(2000);
  }
}
	Program reset counter