

2019_ihsanfixmantap | Arduino 1.8.21.0 (Windows Store 1.8.21.0)

File Edit Sketch Tools Help

2019_ihsanfixmantap

```
#include <Wire.h>
#include <LCD.h>
#include <LiquidCrystal_I2C.h>
#include <Servo.h>

Servo myservo;
int pos;
LiquidCrystal_I2C lcd(0x3F, 2, 1, 0, 4, 5, 6, 7); // 0x27 = alamat I2C modul
//LiquidCrystal_I2C lcd(0x27,2,1,0,4,5,6,7);

void setup()
{
  Serial.begin (9600);
  lcd.begin (16, 2); // LCD 16x2
  lcd.setBacklightPin(3, POSITIVE);
  lcd.setBacklight(HIGH);
  pinMode (4, INPUT);
  digitalWrite (4, HIGH);
  pinMode (5, INPUT);
  digitalWrite (5, HIGH);
  pinMode (6, INPUT);
  digitalWrite (6, HIGH);
  pinMode (7, INPUT);
  digitalWrite (7, HIGH);
  myservo.attach(7);
  myservo.writeMicroseconds(1500); // berhenti
}

void loop()
{
  myservo.writeMicroseconds(1500); // berhenti
  Wire.begin();

  //***** pengenalan pembuat TA *****
  lcd.begin(16, 2);
  lcd.setCursor(0, 0);
  lcd.print("Waein Larut PCB");
  lcd.setCursor(0, 1);
  lcd.print("M IQBAL IHSAN ");
  delay(3000);
  lcd.clear();
}
//***** program utama *****
int counter15, counter20, counter25;
unsigned long timer1s = 0;
float counterupls;
```

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Arduino/Genuine Uno

05.07 01/07/2019

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```
myservo.writeMicroseconds(1500); // berhenti
Wire.begin();

//***** pengenalan pembuat TA *****
lcd.begin(16, 2);
lcd.setCursor(0, 0);
lcd.print("Waein Larut PCB");
lcd.setCursor(0, 1);
lcd.print("M IQBAL IHSAN ");
delay(3000);
lcd.clear();
}
//***** program utama *****
int counter15, counter20, counter25;
unsigned long timer1s = 0;
float counterupls;

void loop () {
  // ===== program counting down, sesuai timer apa yang aktif
  if (millis() - timer1s >= 1000) {
    timer1s = millis();
    if (counter15 >= 1) {
      Serial.println("counter aktif 15 menit");
      counter15 = counter15 - 1;
      lcd.setCursor(0, 0);
    }
  }
}
```

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```
void loop () {
    // ===== program counting down, sesuai timer apa yang aktif
    if (millis() - timer15 >= 1000) {
        timer15 = millis();
        if (counter15 >= 1) {
            Serial.println("counter aktif 15 menit");
            counter15 = counter15 - 1;
            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));
            myservo.writeMicroseconds(2000); // putar kiri
        }
        if (counter20 >= 1) {
            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));
            myservo.writeMicroseconds(2000); // putar kiri
        }
    }
}
```

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Arduino/Genuine Uno

05.09
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```
myservo.writeMicroseconds(2000); // putar kiri
}
if (counter25 >= 1) {
    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));
    myservo.writeMicroseconds(2000); // putar kiri
}
if (counter15 <= 0 && counter20 <= 0 && counter25 <= 0) {
    Serial.println("semua counter off");
    myservo.writeMicroseconds(1500); // berhenti
    lcd.setCursor(0, 0);
    lcd.print(" silakan tekan");
    Serial.println("silakan tekan tombol");
    lcd.setCursor(0, 1);
    lcd.print(" tombol ");
    lcd.print(" ");
}

Serial.println("-----");
//===== dibawah ini program baca tombol / input
```

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Arduino/Genuine Uno

05.10
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The image displays three separate windows of the Arduino IDE, each showing a different version of the same program. The windows are arranged vertically, sharing a common taskbar at the bottom.

Top Window:

```
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}

} //== program reset counter
if (digitalRead(8) == LOW) {
    Serial.println(" Counter Reset >> Stop");
    counter25 = 0;// 25 menit (60*25)
    counter15 = 0;
    counter20 = 0;
    myservo.writeMicroseconds(1500); // berhenti
    lcd.setCursor(0, 0);
    lcd.print("Reset timer");
    Serial.println("Sistem Stopped");
    lcd.setCursor(0, 1);
    lcd.print("Sistem Stopped");
    lcd.print(" ");
    delay(2000);
}
```

Middle Window:

```
153
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}

//===== dibawah ini program baca tombol / input
// jika ada counter down yang masih aktif tombol tidak berfungsi
if (counter15 <= 0 && counter20 <= 0 && counter25 <= 0) {
    //mengaktifkan counter down 15 menit
    if (digitalRead(4) == LOW) {
        Serial.println(" trigger 15 menit");
        counter15 = 15 * 60; // 15 menit (60*15)
        counter20 = 0;
        counter25 = 0;
        lcd.clear();
    }
    // mengaktifkan counter down 20 menit
    if (digitalRead(5) == LOW) {
        Serial.println(" trigger 20 menit");
        counter20 = 20 * 60; // 20 menit (60*20)
        counter15 = 0;
        counter25 = 0;
        lcd.clear();
    }
    // mengaktifkan counter down 25 menit
    if (digitalRead(6) == LOW) {
        Serial.println(" trigger 25 menit");
        counter25 = 25 * 60; // 25 menit (60*25)// siubah brarti 1 menit ya?
        counter15 = 0;
        counter20 = 0;
        lcd.clear();
    }
}
```

Bottom Window:

```
127
Activate Windows
Go to Settings to activate Windows.

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```

The code in all three windows is identical, except for the window title and the status bar at the bottom of the middle and bottom windows, which show the board as "Arduino/Genuino Uno" and the date/time as "05.10 01/07/2019". The code itself is a timer program that handles three digital inputs (pins 4, 5, and 6) and a reset button (pin 8). It uses three counters (counter15, counter20, counter25) to track time in increments of 15, 20, and 25 minutes respectively. When any of these counters reach zero, it triggers a serial print message and clears the LCD screen. If a reset button is pressed (digitalRead(8) == LOW), it prints a message to the serial port and sets all counters to zero, stopping the timers and clearing the LCD.