

PROGRAM FINGERPRINT

```
#include <LiquidCrystal_I2C.h>
#include <Adafruit_Fingerprint.h>
#include <SoftwareSerial.h>

SoftwareSerial mySerial(10,9);
SoftwareSerial fingerSerial(5,6);
Adafruit_Fingerprint adaFinger = Adafruit_Fingerprint(&fingerSerial);

LiquidCrystal_I2C lcd(0x27, 16, 2);

uint16_t readFinger(){
  lcd.clear();
  lcd.print("Tempelkan jari");
  lcd.setCursor(0,1);
  lcd.print("anda");

  Serial.println("validate finger,put your finger...");
  uint8_t result = adaFinger.getImage();
  while(result != FINGERPRINT_OK) {
    result = adaFinger.getImage();
  }
  Serial.println("got a finger...");

  result = adaFinger.image2Tz();
  switch(result){
    case FINGERPRINT_OK:
      Serial.println("convert image to feature template...");
      break;
    default:
```

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    Serial.println("error, convert image...");
    break;
}

uint8_t ff = adaFinger.fingerFastSearch();
if(ff == FINGERPRINT_OK) {
    Serial.print("matched...");

    lcd.clear();
    lcd.print("Jari cocok");
    delay(2000);
    lcd.clear();

    return adaFinger.fingerID;
} else if (ff == FINGERPRINT_NOTFOUND) {
    Serial.println("not matched...");

    lcd.clear();
    lcd.print("Jari tidak cocok");
    delay(2000);
    lcd.clear();

    return -1;
}
return -1;
}

void setup() {
    Serial.begin(9600);
    mySerial.begin(4800);
    lcd.begin();

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    lcd.backlight();

    adaFinger.begin(57600);

    lcd.clear();
    lcd.print("Door Lock System");
}

void loop() {
    uint16_t fingerId = readFinger();
    if(fingerId != -1){
        Serial.print("sending fingerId to arduino wemos : " );
        Serial.println(fingerId);
        mySerial.write(fingerId);
    }

    delay(1000);
}

```

Program Wemos Terima Data :

```

#include <ESP8266WiFi.h>
#include <SoftwareSerial.h>
#include <ArduinoHttpClient.h>

char ssid[] = "#yusufselu";
char pass[] = "cobalagi";

SoftwareSerial mySerial(2, 0);
WiFiClient wifi;
HttpClient client = HttpClient(wifi, "192.168.0.18", 3000);

```

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void setup() {
  Serial.begin(9600);
  mySerial.begin(4800);
  WiFi.begin(ssid,pass);

  while (WiFi.status() != WL_CONNECTED) {
    Serial.println("connecting to wifi...");
    delay(500);
  }
  Serial.println("connected to wifi...");

}

void loop() {
  if(mySerial.available() > 0) {
    int fingerId = mySerial.read();
    Serial.print("get new finger :: ");
    Serial.println(fingerId);
    String sFingerId = String(fingerId);
    requestFinger(sFingerId);
  }

  delay(1000);
}

void requestFinger(String fingerId){
  Serial.println("making POST request");
  String contentType = "application/x-www-form-urlencoded";
  String postData = "finger_id=";

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postData.concat(fingerId);
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client.post("/", contentType, postData);
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int statusCode = client.responseStatusCode();
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String response = client.responseBody();
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Serial.print("Status code: ");
```

```
Serial.println(statusCode);
```

```
Serial.print("Response: ");
```

```
Serial.println(response);
```

```
}
```