//This program pin is work for the product like https://www.flyrobo.in/finger\_print\_sensor

//here wire connection is as

//fingerprint sensor white wire - pin 3, yellow wire - pin 2, red wire - “+5v” , black wire - “GND”

//servo wire - pin 4

#include <Adafruit\_Fingerprint.h>

#include <SoftwareSerial.h>

SoftwareSerial mySerial(2, 3);

Adafruit\_Fingerprint finger = Adafruit\_Fingerprint(&mySerial);

void setup()

{

Serial.begin(9600);

while (!Serial); // For Yun/Leo/Micro/Zero/...

delay(100);

Serial.println("fingertest");

pinMode(12, OUTPUT);

// set the data rate for the sensor serial port

finger.begin(57600);

if (finger.verifyPassword()) {

Serial.println("Found fingerprint sensor!");

} else {

Serial.println("Did not find fingerprint sensor :(");

while (1) { delay(1); }

}

finger.getTemplateCount();

Serial.print("Sensor contains "); Serial.print(finger.templateCount); Serial.println(" templates");

Serial.println("Waiting for valid finger...");

}

void loop() // run over and over again

{

getFingerprintIDez();

delay(50); //don't ned to run this at full speed.

digitalWrite(12, LOW);

}

uint8\_t getFingerprintID() {

uint8\_t p = finger.getImage();

switch (p) {

case FINGERPRINT\_OK:

Serial.println("Image taken");

break;

case FINGERPRINT\_NOFINGER:

Serial.println("No finger detected");

return p;

case FINGERPRINT\_PACKETRECIEVEERR:

Serial.println("Communication error");

return p;

case FINGERPRINT\_IMAGEFAIL:

Serial.println("Imaging error");

return p;

default:

Serial.println("Unknown error");

return p;

}

// OK success!

p = finger.image2Tz();

switch (p) {

case FINGERPRINT\_OK:

Serial.println("Image converted");

break;

case FINGERPRINT\_IMAGEMESS:

Serial.println("Image too messy");

return p;

case FINGERPRINT\_PACKETRECIEVEERR:

Serial.println("Communication error");

return p;

case FINGERPRINT\_FEATUREFAIL:

Serial.println("Could not find fingerprint features");

return p;

case FINGERPRINT\_INVALIDIMAGE:

Serial.println("Could not find fingerprint features");

return p;

default:

Serial.println("Unknown error");

return p;

}

// OK converted!

p = finger.fingerFastSearch();

if (p == FINGERPRINT\_OK) {

Serial.println("Found a print match!");

} else if (p == FINGERPRINT\_PACKETRECIEVEERR) {

Serial.println("Communication error");

return p;

} else if (p == FINGERPRINT\_NOTFOUND) {

Serial.println("Did not find a match");

return p;

} else {

Serial.println("Unknown error");

return p;

}

// found a match!

Serial.print("Found ID #"); Serial.print(finger.fingerID);

Serial.print(" with confidence of "); Serial.println(finger.confidence);

return finger.fingerID;

}

// returns -1 if failed, otherwise returns ID #

int getFingerprintIDez() {

uint8\_t p = finger.getImage();

if (p != FINGERPRINT\_OK) return -1;

p = finger.image2Tz();

if (p != FINGERPRINT\_OK) return -1;

p = finger.fingerFastSearch();

if (p != FINGERPRINT\_OK) return -1;

// found a match!

digitalWrite(12, HIGH);

delay(3000);

digitalWrite(12, LOW);

Serial.print("Found ID #"); Serial.print(finger.fingerID);

Serial.print(" with confidence of "); Serial.println(finger.confidence);

return finger.fingerID;

}