**IOTL\_Group\_B\_Assignment\_No\_13**

const int buzzer = A1; // LED connected to digital pin 13

const int knockSensor = A1; // the piezo is connected to analog pin 0

const int threshold = 400; // threshold value to decide when the detected sound is a knock or not

// these variables will change:

int sensorReading = 0; // variable to store the value read from the sensor pin

void setup() {

pinMode(buzzer,INPUT);

}

void loop() {

// read the sensor and store it in the variable sensorReading:

pinMode(buzzer,INPUT);

sensorReading = analogRead(knockSensor);

// if the sensor reading is greater than the threshold:

if (sensorReading >= threshold) {

pinMode(buzzer,OUTPUT);

tone(buzzer,261);

// Waits some time to turn off

delay(200);

//Turns the buzzer off

noTone(buzzer);

// Sounds the buzzer at the frequency relative to the note D in Hz

tone(buzzer,293);

delay(200);

noTone(buzzer);

// Sounds the buzzer at the frequency relative to the note E in Hz

tone(buzzer,329);

delay(200);

noTone(buzzer);

// Sounds the buzzer at the frequency relative to the note F in Hz

tone(buzzer,349);

delay(200);

noTone(buzzer);

// Sounds the buzzer at the frequency relative to the note G in Hz

tone(buzzer,392);

delay(200);

noTone(buzzer);

}

delay(100); // delay to avoid overloading the serial port buffer

}