

ASSIGNMENT 1

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SECTION : INTERNET OF THINGS

WOKWI LINK for Assignment 1 : <https://wokwi.com/projects/363227799239112705>

CODE :

```
#include <LiquidCrystal_I2C.h>

LiquidCrystal_I2C lcd (0x27, 16, 2);

const int trigPin = 6;

const int echoPin = 7;

int buzzer = 8;

long duration;

int jarakCm, jarakInch;

int ledPin = 5;

int lux;

int i;

void setup() {

// put your setup code here, to run once:

lcd.begin(12,2);

pinMode(trigPin, OUTPUT);

pinMode(echoPin, INPUT);

Serial.begin(9600);

pinMode(ledPin, OUTPUT);

}
```

```
void loop() {  
  // put your main code here, to run repeatedly:  
  digitalWrite(trigPin, LOW);  
  delayMicroseconds(2);  
  digitalWrite(trigPin, HIGH);  
  delayMicroseconds(10);  
  digitalWrite(trigPin, LOW);  
  duration = pulseIn(echoPin,HIGH);  
  jarakCm = duration*0.034/2;  
  jarakInch = duration*0.0133/2;  
  lcd.setCursor(0,0);  
  lcd.print("jarak: ");  
  lcd.print(jarakCm);  
  lcd.print(" cm ");  
  delay(10);  
  lcd.setCursor(0,1);  
  lcd.print("jarak: ");  
  lcd.print(jarakInch);  
  lcd.print(" inch ");  
  delay(10);  
  if(jarakCm <=5){  
    tone(buzzer,1030);  
    delay(400);  
    noTone(8);  
    delay(100);  
  }  
}
```

```
}  
  
lux=analogRead(A0);  
  
i= map(lux, 0, 1023, 0, 255);  
  
analogWrite(ledPin,i);  
  
}
```

OUTPUT:



