ASSIGNMENT - 1

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SECTION : INTERNET OF THINGS

WOKWI LINK for Assignment 1 : https://wokwi.com/projects/363226791034269697

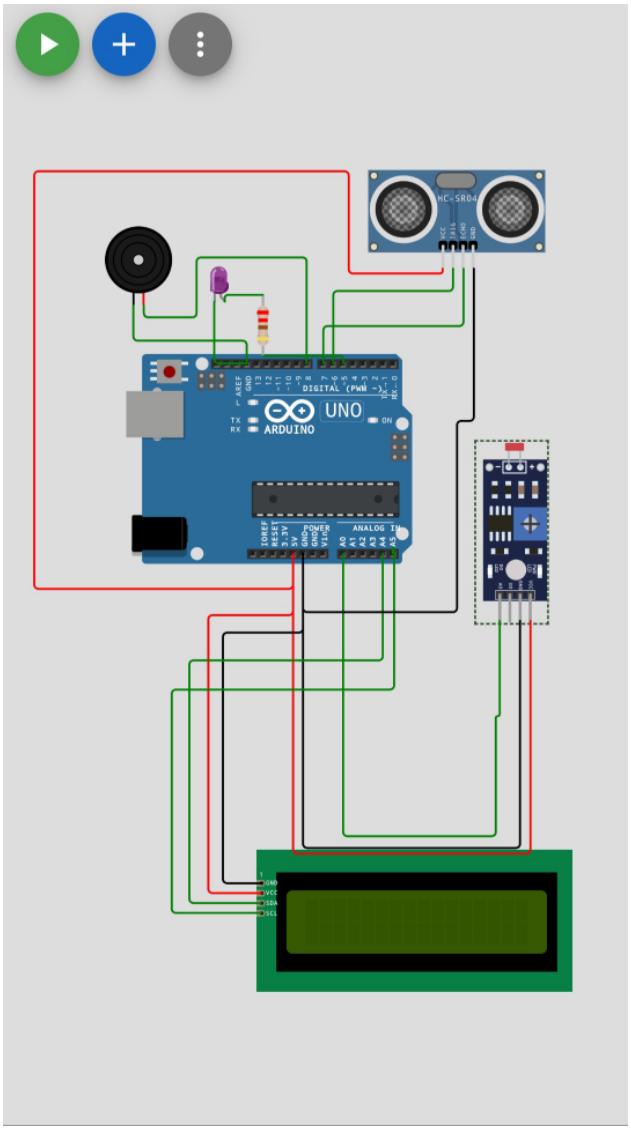
CODE :

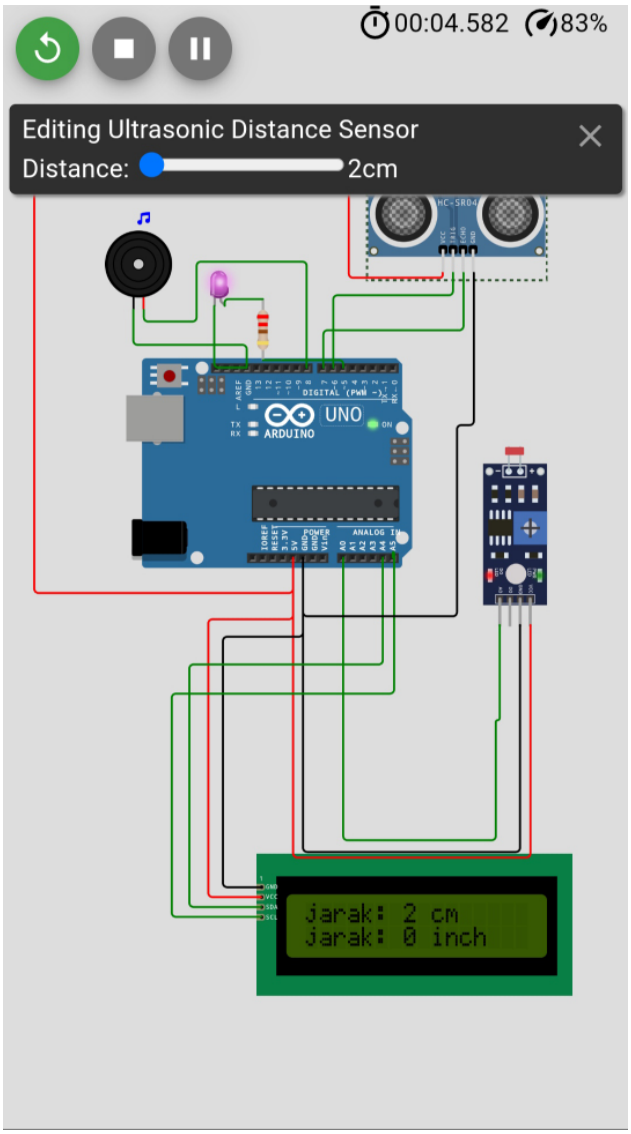
```
#include <LiquidCrystal_I2C.h>

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 :

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83%
Editing Ultrasonic Distance Sensor
Distance:
2cm
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jarak: 2 cm
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