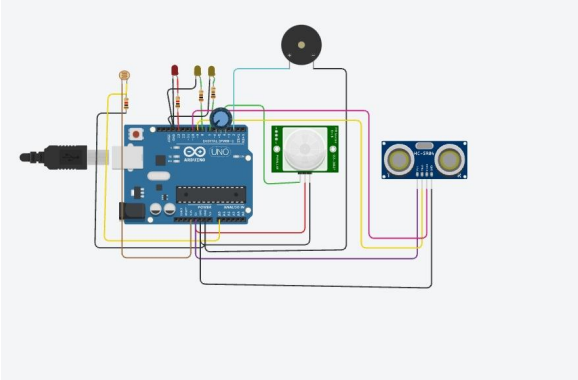
ASSIGNMENT

Create a home automation using 2-3 sensors



```
int light = 0;
int const trigPin = 9;
int const echoPin = 10;
int const buzzPin = 2;

void setup()
{
 Serial.begin(9600);
 pinMode(13,OUTPUT);
 pinMode(4,INPUT);
 pinMode(8, OUTPUT);
 pinMode(7, OUTPUT);
 pinMode(trigPin, OUTPUT);
 pinMode(echoPin, INPUT);
 pinMode(buzzPin, OUTPUT);

}

void loop()
{
  int p= digitalRead(4);
  Serial.println(p);

  if(p)
    digitalWrite(13,HIGH);
  else
    digitalWrite(13,LOW);
  delay(1000);

    light = analogRead(A0);

    Serial.println(light);

    if(light > 450) {
        Serial.println("It is quite light!");
        digitalWrite(8,LOW);
        digitalWrite(7,LOW);
    }
    else if(light > 229 && light < 451) {
        Serial.println("It is average light!");
       digitalWrite(8, HIGH);
       digitalWrite(7,LOW);
    }
    else {
        Serial.println("It is pretty dark!");
        digitalWrite(8,HIGH);
        digitalWrite(7,HIGH);
    }
    delay(1000);
  int duration, distance;
  tone(buzzPin,20);
    digitalWrite(trigPin, HIGH);
    delay(1000);
    digitalWrite(trigPin, LOW);
    duration = pulseIn(echoPin, HIGH);
    distance = (duration/2) / 29.1;
    delay(10);
    if (distance <= 10 && distance >= 0) {
        digitalWrite(buzzPin, HIGH);
    } else {
        digitalWrite(buzzPin, LOW);
    }
    delay(60);

}
```

TINKER CAD LINK:

https://www.tinkercad.com/things/dhOepXTKMCv-assignment-1/editel?sharecode=obxR-4yEk8OUqW5wC8y0e6Mrbik_mRMbpR0M3pq4BTY