Name: Guruvir Mongia UID: 18MCA8103

**Practical Assignment**

1. **PIR sensor to detect motion and light the bulb.**

Code:

int releNO = 13;

int inputPir = 2;

int val = 0;

int resuldoSensorLDR;

int sensorLDR = A0;

void setup()

{

pinMode(releNO, OUTPUT);

pinMode(inputPir, INPUT);

pinMode(sensorLDR, INPUT);

Serial.begin(9600);

}

void loop()

{

val = digitalRead(inputPir);

resuldoSensorLDR = analogRead(sensorLDR);

if(resuldoSensorLDR<600)

{

if(val == HIGH)

{

digitalWrite(releNO, HIGH);

delay(5000);

}

else{

digitalWrite(releNO, LOW);

delay(300);

}

}

else{ digitalWrite (releNO, LOW);

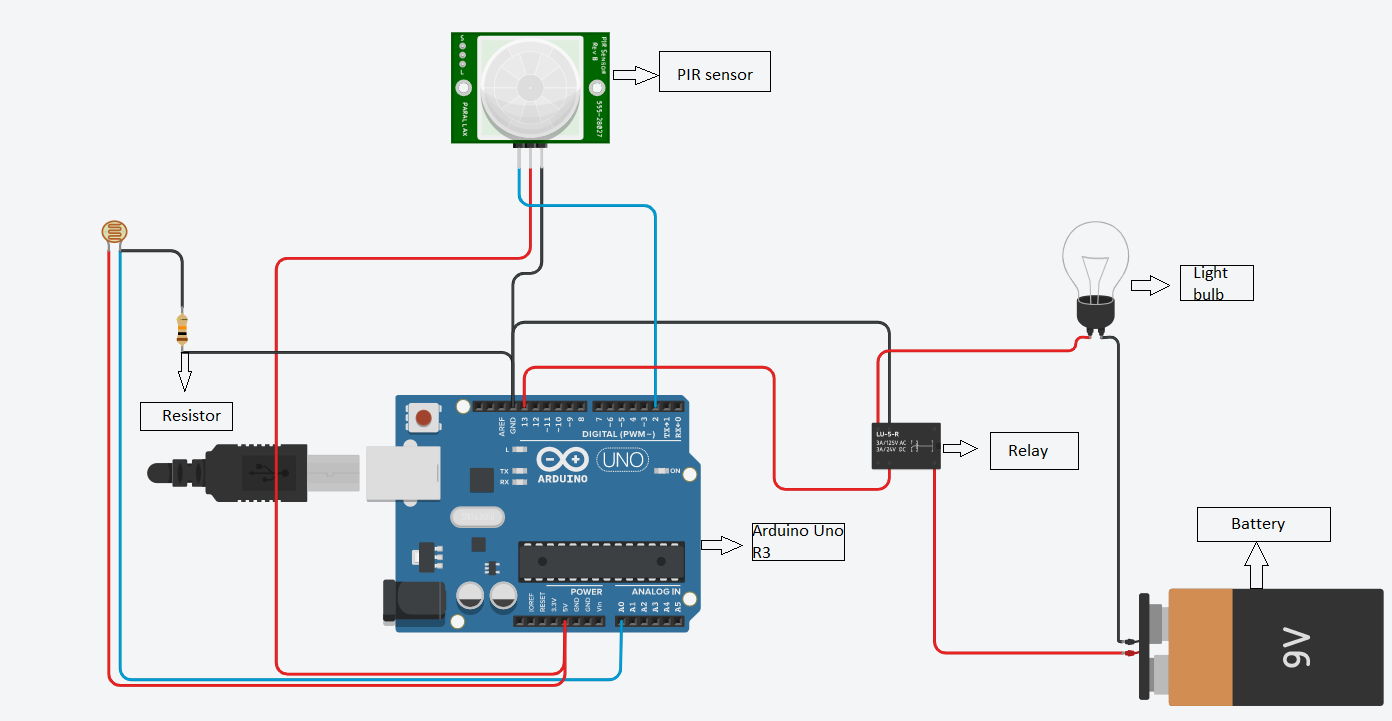
Serial.println(resuldoSensorLDR);

delay(500);

}

}

**Circuit diagram:**



1. **Water Level Detector.**

Code:

void setup()

{

pinMode(13, OUTPUT);

}

void loop()

{

digitalWrite(13, HIGH);

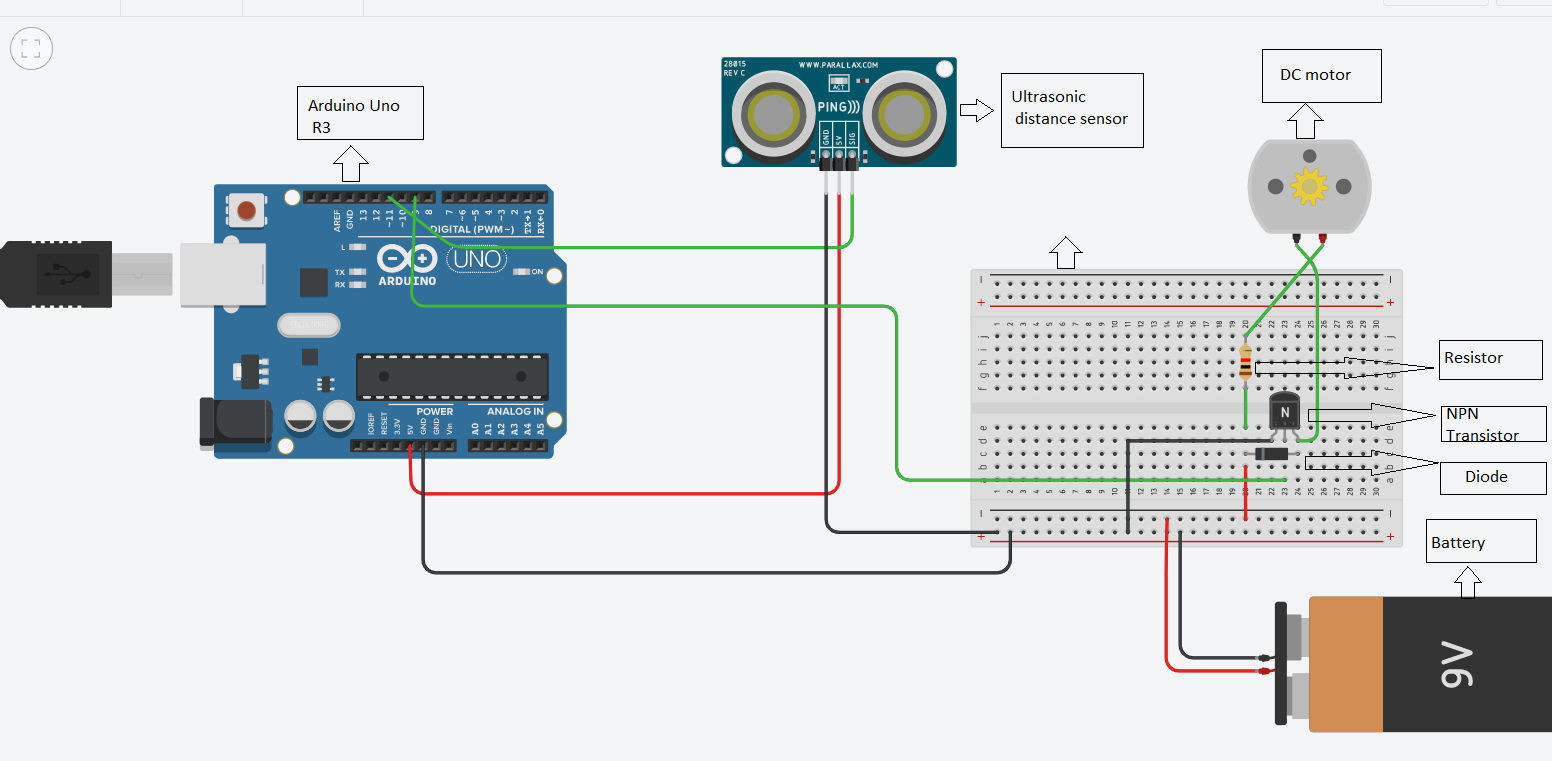
delay(1000); // Wait for 1000 millisecond(s)

digitalWrite(13, LOW);

delay(1000); // Wait for 1000 millisecond(s)

}

**Output:**



1. **Smoke sensor with buzzer alarm.**

Code:

const int gasPin = A0;

void setup()

{

Serial.begin(9600);

}

void loop()

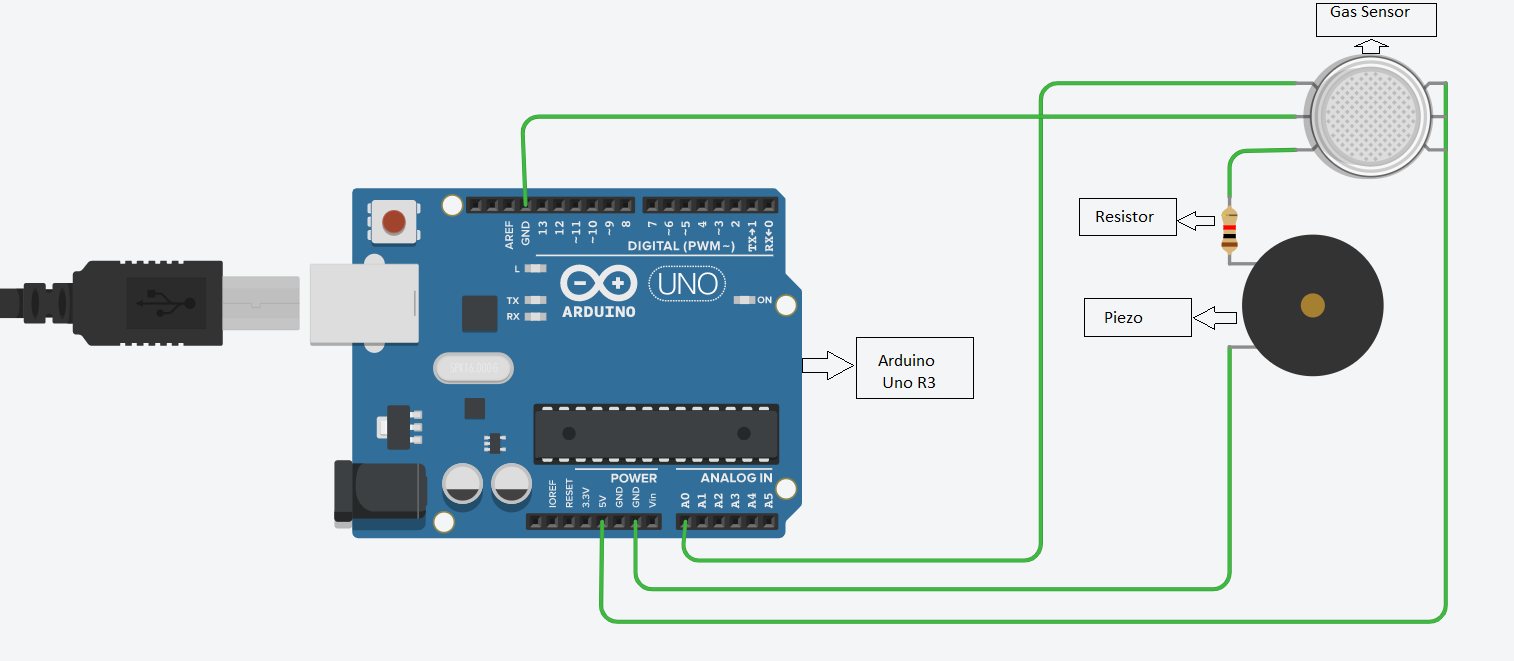
{

Serial.println(analogRead(gasPin));

delay(1000);

}

**Output:**



1. **Room having 2 light bulb and 2 fan.**

Code:

void setup()

{

pinMode(13, OUTPUT);

}

void loop()

{

digitalWrite(13, HIGH);

delay(1000); // Wait for 1000 millisecond(s)

}

Output:

