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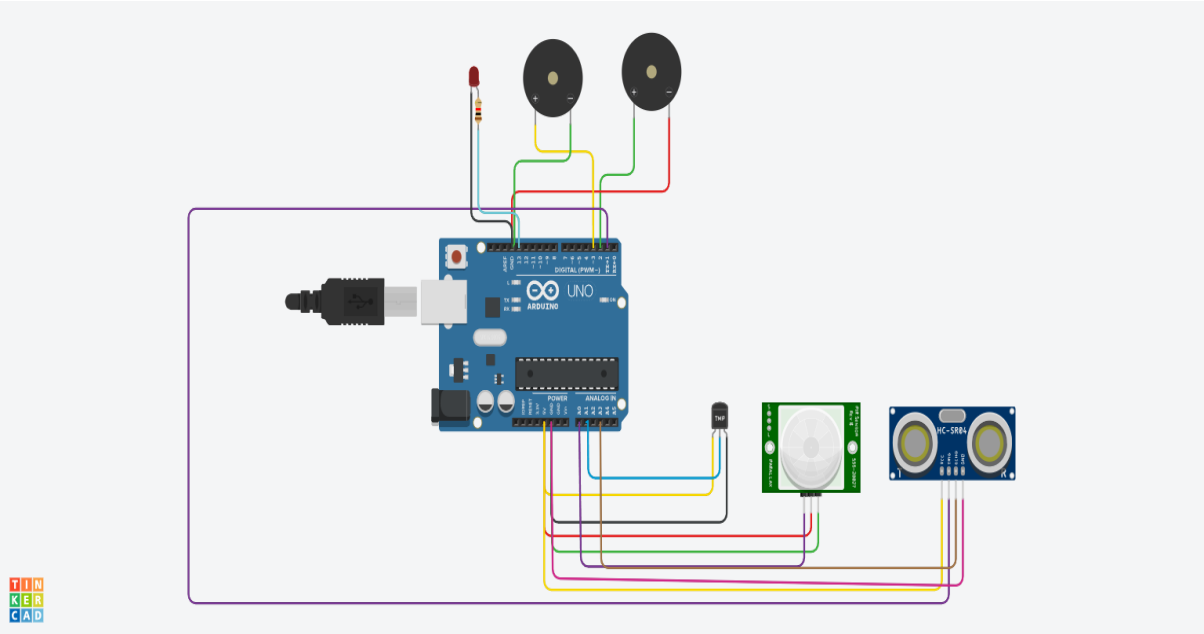
Assignment : Home automation



Code:

```
byte tmp=A1;
byte buzzer=2;
byte buzzer1=3;
byte PIR=A0;
int t = 1;
int e = A3;
int led = 13;
int tmplevel,tmplevel1,PIR1,gas1;


void setup()
{
  pinMode(buzzer, OUTPUT);
  pinMode(tmp,INPUT);
  pinMode(PIR, INPUT);
  pinMode(buzzer, OUTPUT);
  pinMode(buzzer1, OUTPUT);
  pinMode(t, OUTPUT);
  pinMode(e, INPUT);
  pinMode(led,OUTPUT);
```

```
 Serial.begin(9400);

}

void loop()
{
 tmplevel=analogRead(tmp);
 PIR1=digitalRead(PIR);
 int b=map(gas1,0,1023,0,255);
 tmplevel1=tmplevel*0.488;
 //Temperature chech
 if(tmplevel1>60)
 {
  Serial.println("Temperature High");
  Serial.println(tmplevel1);
  digitalWrite(buzzer,HIGH);
  delay(100);

 }
 else
 {
  Serial.println("Temperature Low");
  digitalWrite(buzzer,LOW);
 }
 //Movement check
 if(PIR1==HIGH)
 {
  Serial.println("Movement Detected");
  digitalWrite(buzzer1,HIGH);
  delay(100);

 }
 else
 {
  Serial.println("Movement  not Detected");
  digitalWrite(buzzer1,LOW);
 }
 digitalWrite(t, LOW);
 digitalWrite(t, HIGH);
 delayMicroseconds(10);
 digitalWrite(t, LOW);
 float duration = pulseIn(e, HIGH);
 float distance = (duration * 0.034) / 2;
 Serial.print("Distance to take Tank full:");
 Serial.println(distance);

 //Cheking Tank filling
 if(distance < 10)
```

```
 {
    Serial.print("Tank is going to full");
    digitalWrite(led,HIGH);

 }
 else
 {
  Serial.print("Tank is Not full");
  digitalWrite(led,LOW);
 }



}
```