

ASSIGNMENT-1

Aim

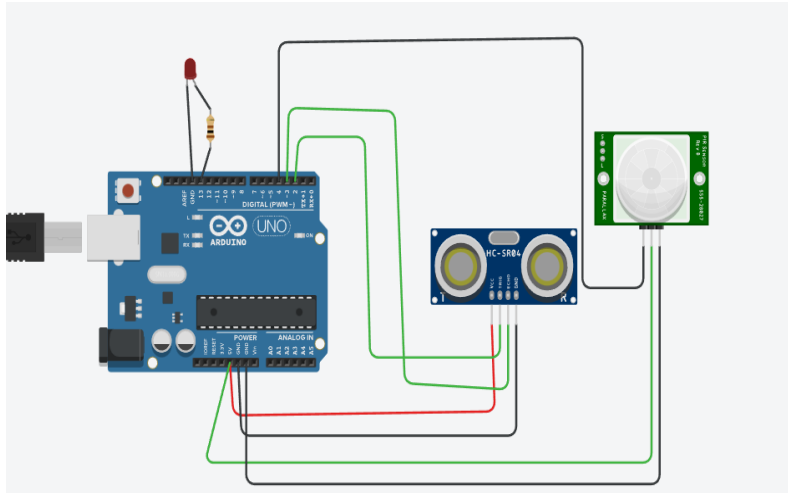
Make a smart home in Tinkercad using two or more sensors ,LED ,Buzzer in single code and circuit.

Program

```
int trigger_pin=2;
int echo_pin=3;
int time;
int distance;
void setup()
{
  Serial.begin(9600);
  pinMode(trigger_pin,OUTPUT);
  pinMode(echo_pin,INPUT);
  pinMode(4,INPUT);
  pinMode(13,OUTPUT);
}
void loop()
{
  digitalWrite(trigger_pin,HIGH);
  delayMicroseconds(10);
  digitalWrite(trigger_pin,LOW);
  time=pulseIn(echo_pin,HIGH);
  distance=(time*0.034)/2;
  if(distance<=10)
```

```
{  
  Serial.println("Door open");  
  Serial.print("Distance=");  
  Serial.println(distance);  
  delay(500);  
}  
else{  
  Serial.println("Door closed");  
  Serial.print("Distance=");  
  Serial.println(distance);  
  delay(500);  
  int p=digitalRead(4);  
  if(p)  
  {  
    digitalWrite(13,HIGH);  
    Serial.println("motion detected");  
  }  
  else  
  {  
    digitalWrite(13,LOW);  
    Serial.println("not detected");  
  }  
}  
}
```

OUTPUT:



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