ASSIGNMENT-1

Aim

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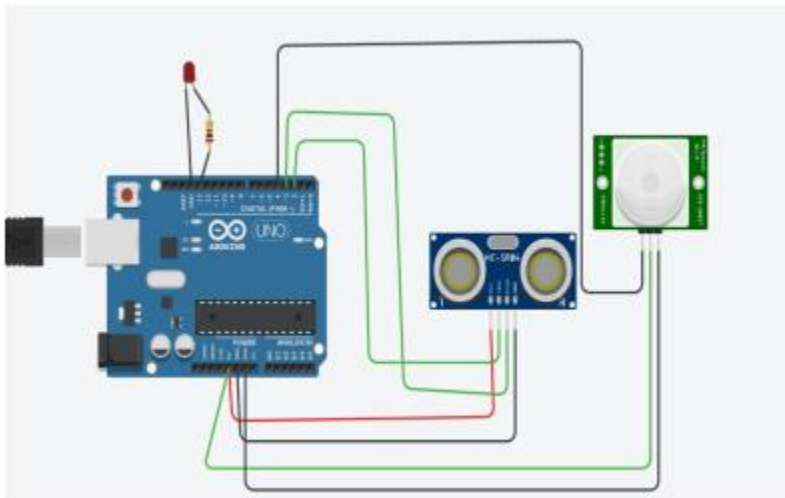
code and circuit.

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);
```

```cpp
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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