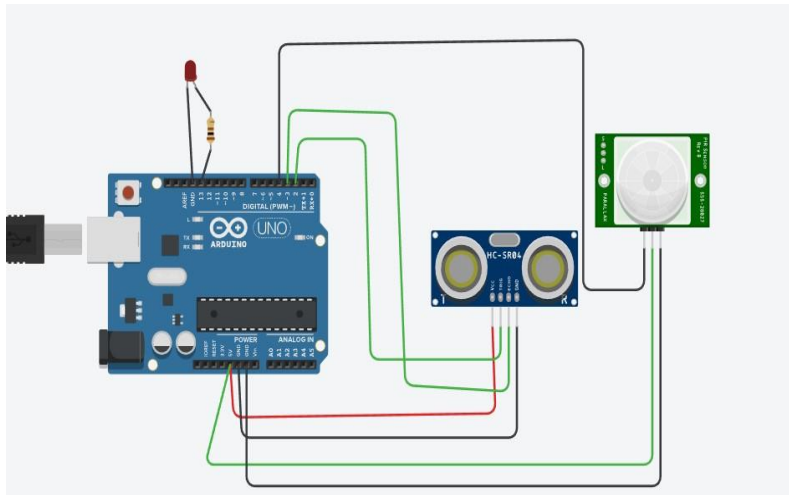# ASSIGNMENT-1

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);

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:

By,

M.Maria leo mesha