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

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