# Assignment

| Assignment Date | 28 April 2023 |
|---|---|
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Question-1:

Build a smart home in tinkercad Use atleast 2 sensors, led, buzzer in a circuit. Simulate in a single code.

**Solution:**

```
const int echoPin=2, triggerPin=3, red=4, green=5, blue=6;

const int buzz = 7;

 int pulseValue;

 float distance;

 void setup( )

 {

pinMode(echoPin, INPUT);

 pinMode(triggerPin, OUTPUT);

 pinMode(red, OUTPUT);

 pinMode(green, OUTPUT);

 pinMode(blue, OUTPUT);

pinMode(buzz, OUTPUT);

 Serial.begin(9600);
```

```
}
void loop( )
 {
digitalWrite(triggerPin, LOW);
delayMicroseconds(5);
digitalWrite(triggerPin, HIGH);
delayMicroseconds(10);
 pulseValue=pulseIn(echoPin, HIGH);
distance=(pulseValue*0.0001657*39.37);
if (distance<=5)
 {
digitalWrite(red, HIGH);
 digitalWrite(green, LOW);
digitalWrite(blue, LOW);
 tone(buzz, 500);
 }
else if (distance<=10)
 {
digitalWrite(green, HIGH);
digitalWrite(red, LOW);
digitalWrite(blue, LOW);
tone(buzz, 1000);
 }
Else
 {
digitalWrite(blue, HIGH);
```

```
digitalWrite (red, LOW);

digitalWrite (green, LOW);

 tone(buzz, 1500);

}

Serial.p rint(dis tance);

 Serial.p rintln(" inch/es ");

 delay(5 00);

 }
```