Assignment -1
Tinkercad

Assignment Date	19 September 2022
Student Name	Mr.A.Absarkhan
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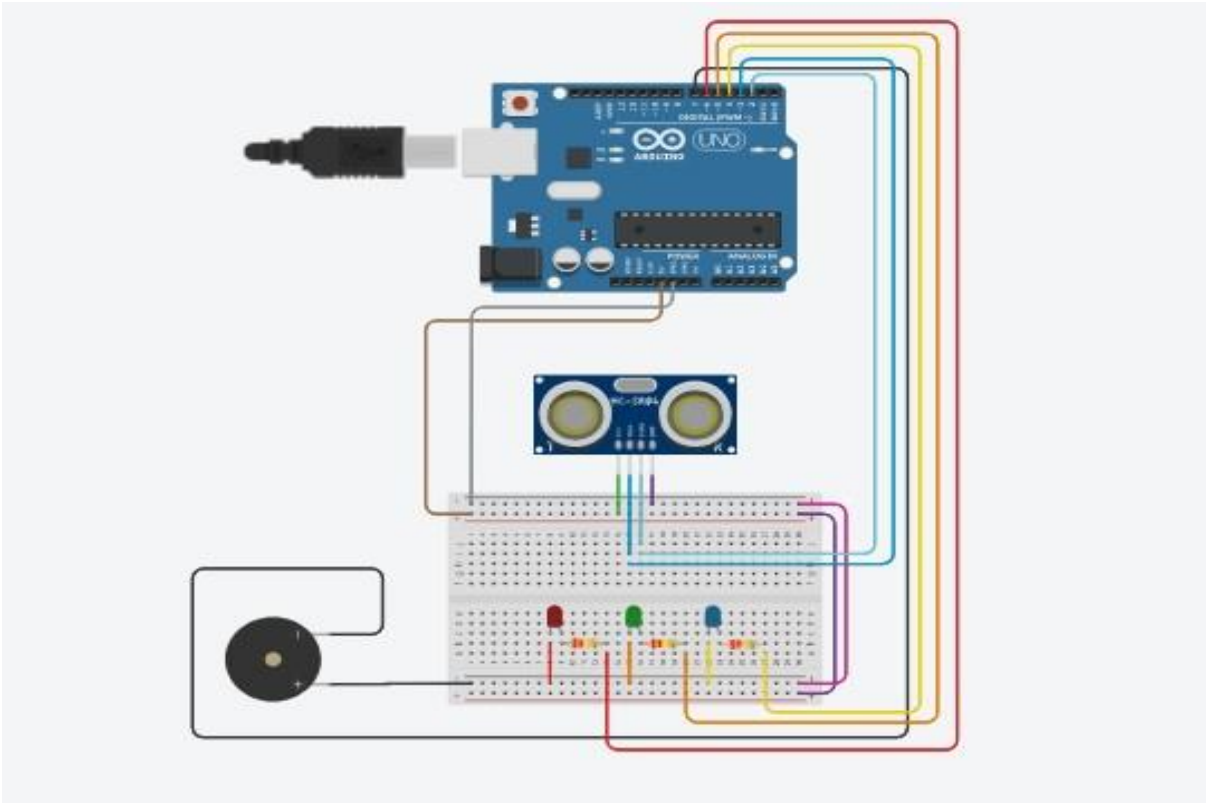
Maximum Marks	2 Marks

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);
}
```