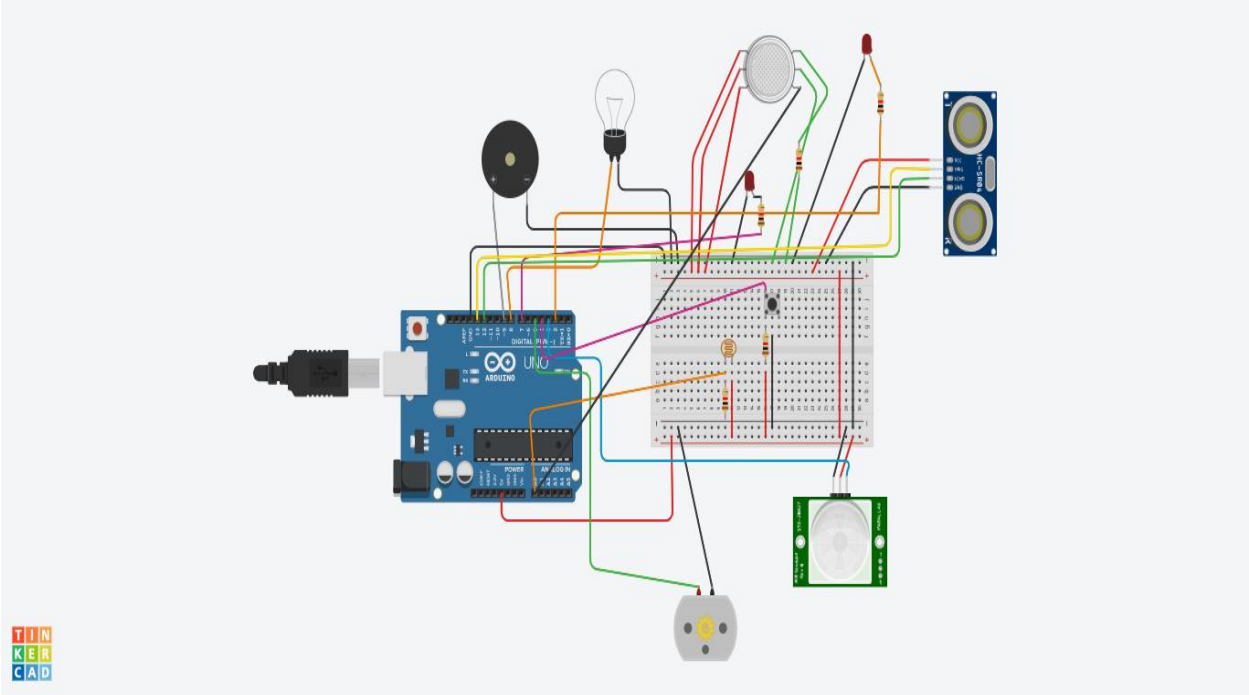
ASSIGNMENT 1

NAME:DEVI PRIYA P

ROLL NUMBER:110719106006

OBJECTIVE:

To build a small home in tinkercad using atleast 2 sensors , buzzer, LED in a circuit and to stimulate in a single code.



CODE:

```
int sensorReading = 0;

int inches = 0;

int cm = 0;
```

```
int triggerPin = 13;
int echoPin = 12;
int defult = 0;
long readUltrasonicDistance(int triggerPin,int echoPin)
{
pinMode(triggerPin, OUTPUT);
digitalWrite(triggerPin, LOW);
delayMicroseconds(2);
digitalWrite(triggerPin, HIGH);
delayMicroseconds(10);
digitalWrite(triggerPin, LOW);
pinMode(echoPin, INPUT);
return pulseIn(echoPin, HIGH);
}
int adcPin = 0;
int adcValue = 0;
float v; float rs,ppm;
int buttonState = 0;
void setup()
{
pinMode(8, OUTPUT);
pinMode(A0, INPUT);
Serial.begin(9600);
```

```
 pinMode(2, OUTPUT);
cm = 0.01723*readUltrasonicDistance(triggerPin, echoPin);
defult = cm;
 Serial.print(defult);
 pinMode(3, INPUT);
pinMode(9, OUTPUT);
 pinMode(5, OUTPUT);
pinMode(4, INPUT);
 //Motor
pinMode(7, OUTPUT);
pinMode(A1, INPUT);
 }
 void loop()
 sensorReading = analogRead(A0);
 if(sensorReading < 900)
{
digitalWrite(8, HIGH);
 }
Else
{
digitalWrite(8, LOW);
}
 cm = 0.01723*readUltrasonicDistance(triggerPin, echoPin) ;
```

```
 if(cm < defult){ digitalWrite(2,HIGH);
delay(50); digitalWrite(2,LOW);
 }
Else
{
 digitalWrite(2,LOW);
 }
 int value = digitalRead(3);
 if (value == 1)
 {
 tone(9, 440, 1000);
}
buttonState = digitalRead(4);
 if(buttonState == 1)
{
 digitalWrite(5,0);


}
 Else
{
 digitalWrite(5,HIGH);
}
 int sensor_gas = analogRead(A1);
```

```
 if(sensor_gas >= 400)
{
 digitalWrite(7,HIGH);
}
 Else
{
digitalWrite(7,LOW);
}
 delay(1000);
}
```