

## Assignment -1

### Arduino using Tinkercad

Assignment Date	19 September 2022
Student Name	Mr. S. Rama Krishnan
Student Roll Number	911019104017
Maximum Marks	2 Marks

#### Question-1:

Make a Smart Home in Tinkercad, using 2+ sensors, Led, Buzzer in single code and circuit.

#### Solution code:

```
void setup(){
  Serial.begin(9600);
  pinMode(3,OUTPUT);
  pinMode(2,INPUT);
  pinMode(13,OUTPUT);
  pinMode(12,OUTPUT);
  pinMode(11,OUTPUT);
  pinMode(8,OUTPUT);
}

void loop(){
  digitalWrite(3,LOW);
  digitalWrite(3,HIGH);
  float duration=pulseIn(2,HIGH);
  duration = duration/2;
  //speed = 0.034
  float distance = duration*0.034;
  Serial.print("distance : ");
  Serial.print(distance);
  Serial.println("cm");
  double temp=analogRead(A0);
  temp = temp/1024;
  Serial.println(temp);
  if(distance < 150){
```

```

digitalWrite(11,1);
digitalWrite(8,0);
if(temp>0.16){
    digitalWrite(13,1);
    digitalWrite(12,0);
    Serial.println("Temperature Warning");
}
else{
    digitalWrite(12,1);
    digitalWrite(13,0);
    Serial.println("Tempature is Normal");
}
}
else{
    digitalWrite(8,1);
    digitalWrite(11,0);
    digitalWrite(12,0);
    digitalWrite(13,0);
}
}

```

## Output:

