

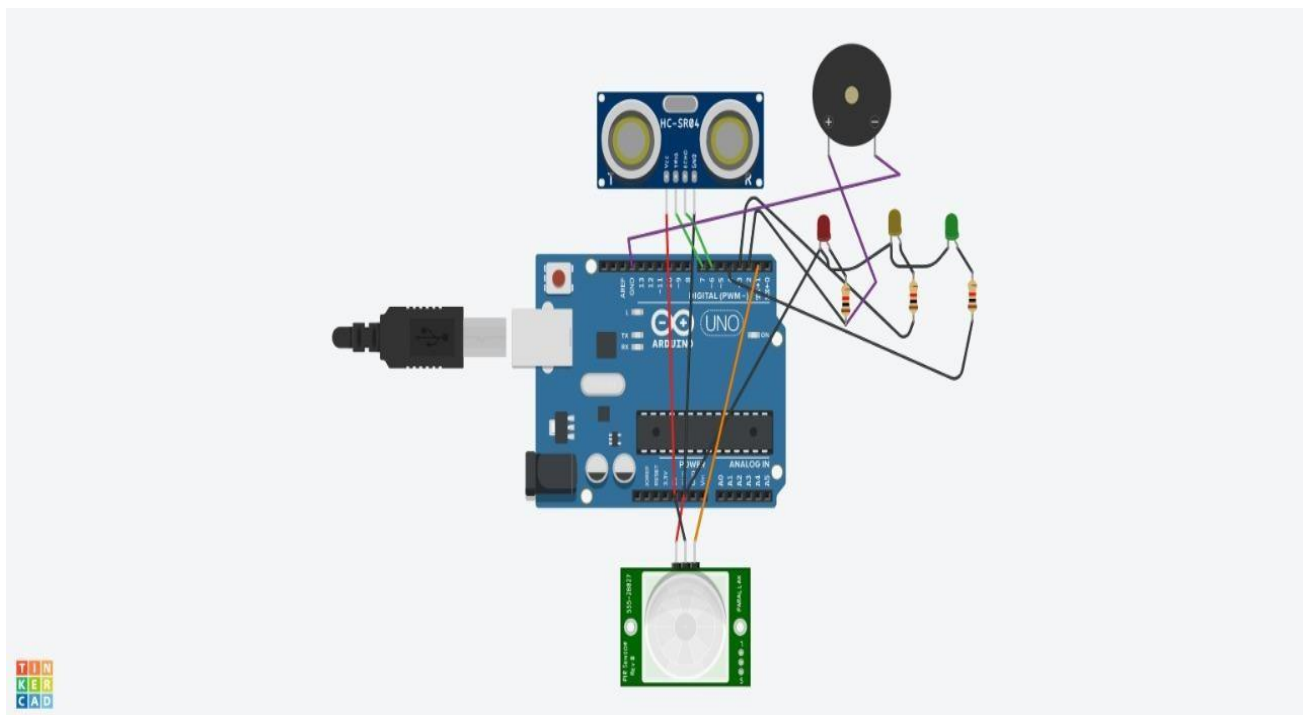
## ASSIGNMENT -1

Assignment Date	18 September 2022
Student Name	Sanjai R
Student Roll Number	721219106046
Maximum Marks	2 Marks

**Question :** Make a Smart Home in Tinkercad , using 2+ sensors , Led , Buzzer in Single code and Circuit.

Solution:

### CIRCUIT



### CODE

```
#define t 7  
#define e 6  
#define r 2  
#define y 3  
#define g 4
```

```
void setup()  
{  
  Serial.begin(9600);  
  pinMode(t,OUTPUT);  
  pinMode(e,INPUT);  
  pinMode(r,OUTPUT);  
  pinMode(y,OUTPUT);  
  pinMode(g,OUTPUT);  
  pinMode(1,INPUT);  
  pinMode(13,OUTPUT);  
}  
void loop()  
{  
  int value = digitalRead(1);  
  digitalWrite(13,value);  
  if(value==1)  
  {  
    Serial.println("Stopped");  
    delay(1000);  
  }  
  else if(value==0)  
  {  
    Serial.println("Moving");  
    delay(1000);  
  }  
  digitalWrite(t,LOW);
```

```
digitalWrite(t,HIGH);
delayMicroseconds(10);
digitalWrite(t,LOW);
float dur = pulseIn(e,HIGH);
float dia = (dur/2) * 0.0343;
//Serial.print("Distance in cm:");
// Serial.println(dia);
if(dia<100)
{
    digitalWrite(r,HIGH);
    digitalWrite(y,LOW);
    digitalWrite(g,LOW);
}
else if(dia>=100 && dia<=200)
{
    digitalWrite(y,HIGH);
    digitalWrite(r,LOW);
    digitalWrite(g,LOW);
}
else
{
    digitalWrite(g,HIGH);
    digitalWrite(r,LOW);
    digitalWrite(y,LOW);
}
}
```