

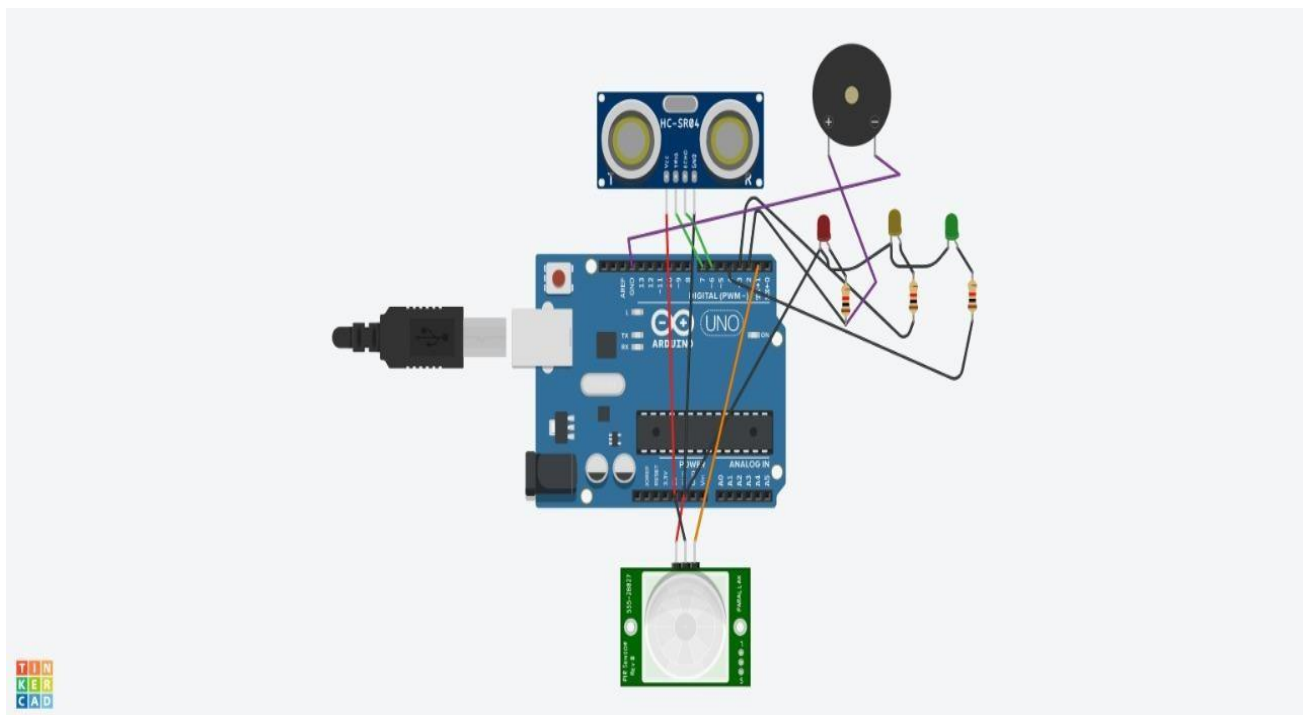
ASSIGNMENT -1

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|---------------------|-------------------|
| Assignment Date | 18 September 2022 |
| Student Name | Sivadhanush T |
| Student Roll Number | 721219106049 |
| 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);
}
}
```