

ASSIGNMENT -1

Assignment Date	19 September 2022
Student Name	Mr. Surendar.K
Student Roll Number	411619104026
Maximum Marks	2 Marks

QUESTION:

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

SOLUTION:

```
int t=2;
int e=3;
void
setup()
{
    Serial.begin(9600);
    pinMode(t,OUTPUT);
    pinMode(e,INPUT);
    pinMode(12,OUTPUT);
}
void loop()
{
    digitalWrite(t,LOW);
    digitalWrite(t,HIGH);
    delayMicroseconds(10);
    digitalWrite(t,LOW);
    float
    dur=pulseIn(e,HIGH);
    float dis=(dur*0.0343)/2;
    Serial.print("Distance
    is: ");
```

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```
Serial.println(dis);
if(dis>=100)
{
    digitalWrite(8,HIGH);

    digitalWrite(7,HIGH);
}
if(dis>=100)
{
    for(int i=0; i<=30000; i=i+10)
    {
        tone(12,i);
        delay(1000);
        noTone(12);
        delay(1000);
    }
}

double a= analogRead(A0);
double t=((a/1024)*5)-0.5)*100;
Serial.print("Temp Value: ");
Serial.println(t);
delay(1000); if(t>=100)
{
    digitalWrite(8,HIGH)
    ;
    digitalWrite(7,HIGH)
    ;
}
if(t>=100)
{
    for(int i=0; i<=30000; i=i+10)
    {
```

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```
tone(12,i);  
delay(1000);  
noTone(12);  
delay(1000);  
}  
}  
if(t<100)  
{  
    digitalWrite(8,LOW);  
    digitalWrite(7,LOW);  
}  
}
```

OUTPUT:

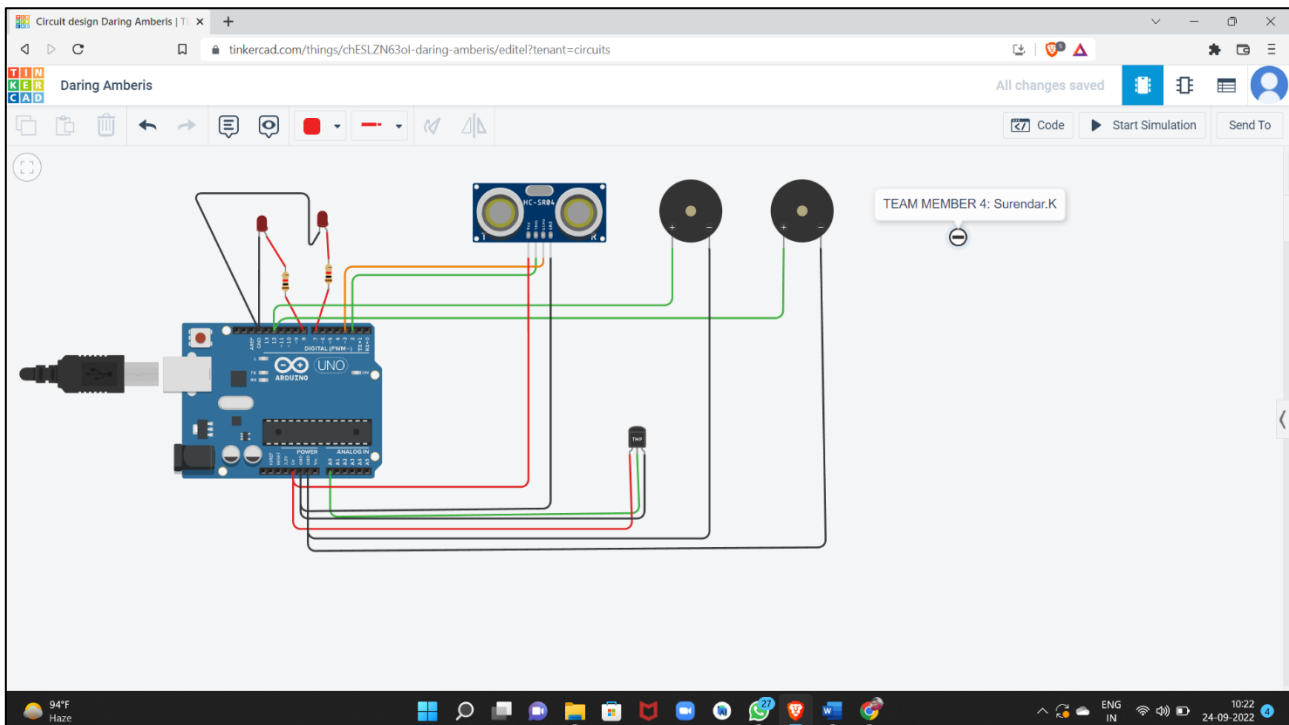


FIGURE 1: HOME AUTOMATION USING ARUDINO