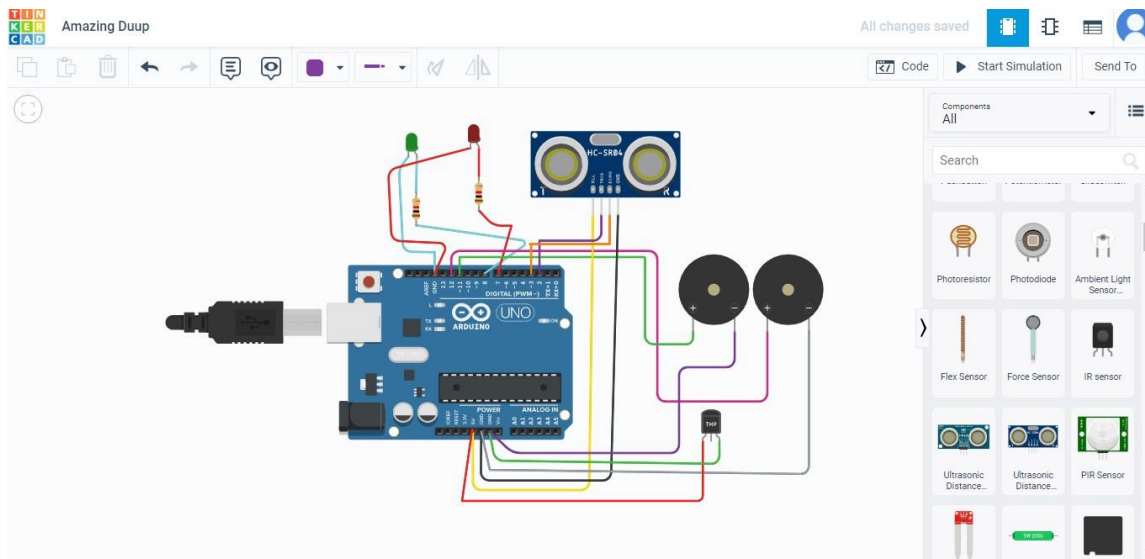


# ASSIGNMENT 1

NAME : KRISHNAKUMAR C

Tincarcard Output:



**CODE FOR SIMULATION:**

```
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: ");

    Serial.println(dis);

    if(dis>=100)

    {

        digitalWrite(87,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(if t>=100)  
    {  
        for(int i=0;i<=30000;i=i+10)  
        {  
            tone(12,i);  
            delay(1000);  
            noTone(112);  
            delay(1000);  
        }  
    }  
}
```

```
        if(t<100)
        {
            digitalWrite(8,LOW);
            digitalWrite(7,LOW);
        }
    }
```