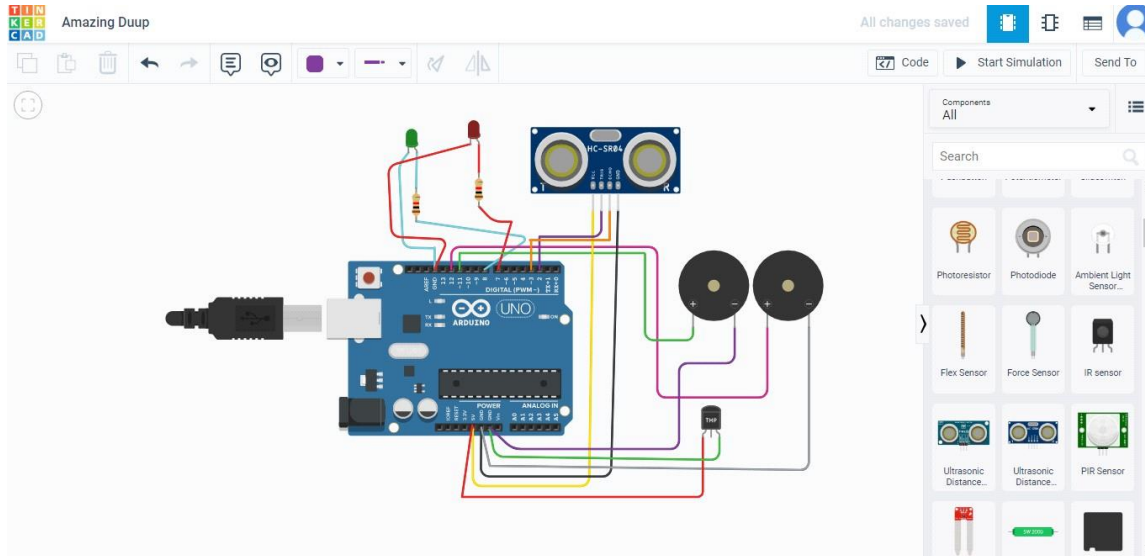


# ASSIGNMENT 1

NAME : Nishanth R

IMAGE:



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()
```

```
{  
  
                                //FOR ULTRASONIC SENSOR//  
  
    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);  
  
                                //FOR LED ON//  
  
    if(dis>=100)  
    {  
        digitalWrite(87,HIGH);  
        digitalWrite(7,HIGH);  
    }  
  
                                //FOR BUZZER - ULTRASONIC SENSOR//  
  
    if(dis>=100)  
    {  
        for(int i=0;i<=30000;i=i+10)  
        {  
            tone(12,i);  
            delay(1000);  
            noTone(12);  
            delay(1000);  
        }  
    }  
}
```

```

    }
}

//FOR TEMPERATE SENSOR//

double a = analogRead(A0);

double t=((a/1024)*5)-0.5)*100;

Serial.print("Temp Value: ");

Serial.println(t);

delay(1000);

//FOR LED ON//

if(t>=100)
{
    digitalWrite(8,HIGH);

    digitalWrite(7,HIGH);
}

//FOR BUZZER - TEMPERATE SENSOR//

if(if t>=100)
{
    for(int i=0;i<=30000;i=i+10)
    {
        tone(12,i);

        delay(1000);

        noTone(112);

        delay(1000);
    }
}

```

```
        //FOR LED OFF//  
    if(t<100)  
    {  
        digitalWrite(8,LOW);  
        digitalWrite(7,LOW);  
    }  
}
```