V S B ENGINEERING COLLEGE, KARUR

Department of Electronics and Communication Engineering

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ASSIGNMENT 1

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Assignment:

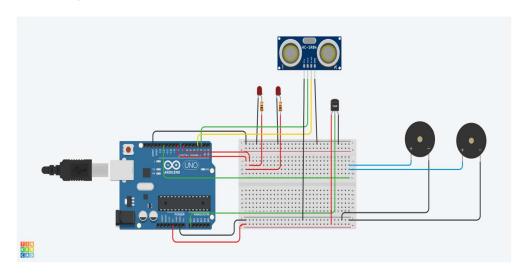
Build a project using arduino UNO interfacing with two sensors, buzzers and LED's.

Code:

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

Circuit Diagram:



Output:

