

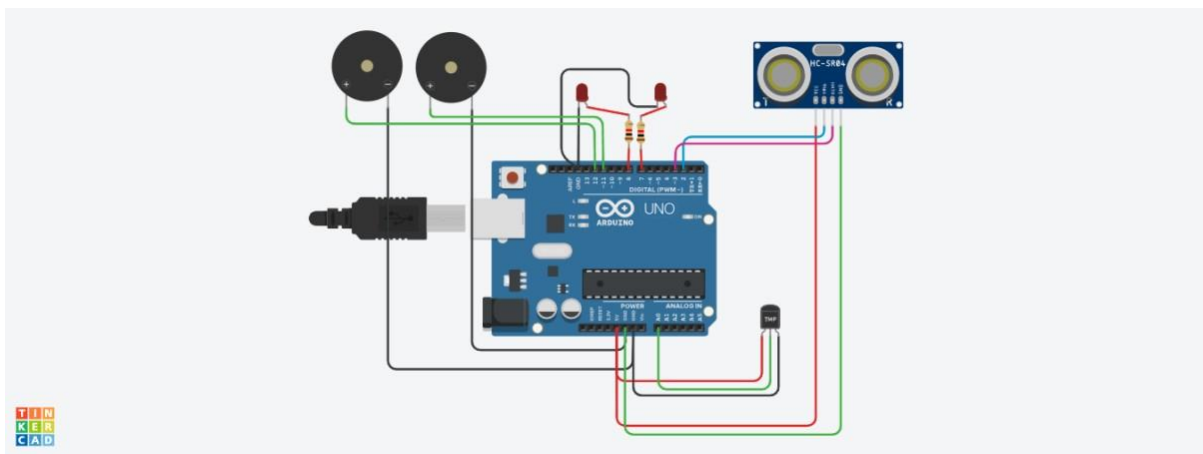
Assignment -1

Assignment Date	18 September 2022
Student Name	Vijay Adhars Raj S
Student Roll Number	620119104113
Maximum Marks	2 Marks

Question:

Build a circuit using 3 sensors.

Circuit diagram:



Cod

```
e: int t=2;
    int
    e=3;

    void setup()
    {
        Serial.begin(9600);
        pinMode(t,OUTPUT)
        ; pinMode(e,INPUT);
        pinMode(12,OUTPU
        T);
    }
    void loop()
```

```

{
    //ultrasonic sensor
    digitalWrite(t,LOW);
    digitalWrite(t,HIGH);
    delayMicroseconds(1
0);
    digitalWrite(t,LOW);
    float
    dur=pulseIn(e,HIGH);
    float dis=(dur*0.0343)/2;
    Serial.print("Distance is:
"); Serial.println(dis);

    //LED ON
    if(dis>=100)
    {
        digitalWrite(8,HIGH
    );
        digitalWrite(7,HIGH
    );
    }

    //Buzzer For ultrasonic
    Sensor if(dis>=100)
    {
        for(int i=0; i<=30000; i=i+10)
        {
            tone(12,i);
            delay(1000
        );
            noTone(12)
        ;
        delay(1000

```

);

}

}

```
//Temperate Sensor
double a=
analogRead(A0);
double t=((a/1024)*5)-
0.5)*100; Serial.print("Temp
Value: "); Serial.println(t);
delay(1000);
```

```
//LED
ON
if(t>=100
)
{
    digitalWrite(8,HIGH
);
    digitalWrite(7,HIGH
);
}
```

```
//Buzzer for Temperature
Sensor if(t>=100)
{
for(int i=0; i<=30000; i=i+10)
{
tone(12,i);
delay(1000
);
noTone(12)
;
delay(1000
);
}
```

```
}
```

```
//LED OFF
```

```
if(t<100)
```

```
{  
  digitalWrite(8,LOW  
);  
  digitalWrite(7,LOW  
);  
}  
}
```