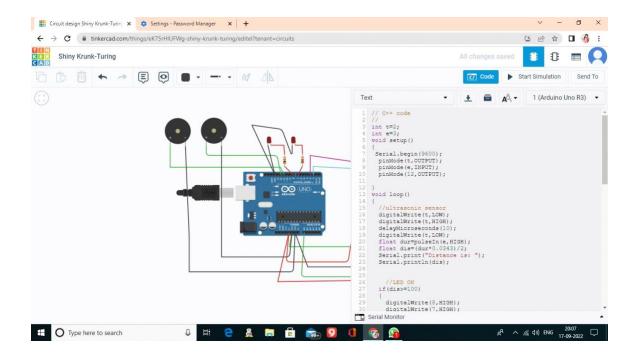
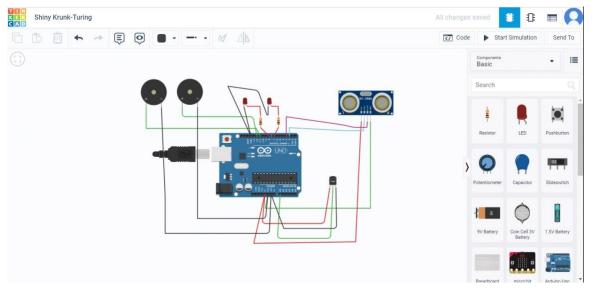
## **ASSIGNMENT 1**

Make a Smart Home in Tinkercard, using 2+ sensor, Led, Buzzer in single code and circuit





```
CODE:
//C++
//
int t=2;
int e=3;
void setup()
{
 Serial.begin(9600);
 pinMode(t,OUTPUT);
 pinMode(e,INPUT);
 pinMode(12,OUTPUT);
}
void loop()
{
 //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);
 //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);
}</pre>
```

## **TINKERCAD LINK:**

https://www.tinkercad.com/things/eK75rHIUFWg-shiny-krunk-turing/editel? tenant=circuits