

ASSIGNMENT – 01

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Team ID	PNT2022TMID31413
Project Name	SIGNS WITH SMART CONNECTIVITY FOR BETTER ROAD SAFETY
Maximum Marks	2 Marks

Make a Smart Home in Tinkercad, using 2+ sensors, LED, Buzzer in single code and circuit.

Source 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: "); S
```

```
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:

