DHAANISH AHMED INSTITUTE OF TECHNOLOGY

NAME:	Febila Jamsheera.U
DEGREE:	Bachelor of Engineering
DEPARTMENT:	Electronics and communication Engineering
ASSIGNMENT:	2
PROJECT NAME:	Smart Farmer-IOT enabled smart Farming Application

Assigned question:

Build a smart home in tinkercard ,use atleast 2 sensors,led,buzzer in a circuit.Simulate in a single code.

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)//(in terms of centimeter)
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);
 //LED ON
 if(t>=100)//(in terms of celsius)
 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);
}
```

OUTPUT:

