

DHAANISH AHMED INSTITUTE OF TECHNOLOGY

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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:



