

S.A ENGINEERING COLLEGE CHENNAI 600077

Department of Electronics and Communication Engineering

IOT Assignment

Topic: Assignment on home automation with sensors and light

DOMAINNAME: Internet Of Things

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Code:-

```
int    t=2;
inte=3;
voidsetup
()
{
  Serial.begin(9600);pinMode(t,OUTPUT
);pinMode(e,INPUT);pinMode(12,OUT
PUT);
}
voidloop()
{
  digitalWrite(t,LOW);

  digitalWrite(t,HIGH);delayMicroseconds
(10);digitalWrite(t,LOW);floatdur=pulseIn
(e,HIGH);floatdis=(dur*0.0343)/2;Seri
al.print("Distance is:
");Serial.println(dis);

}
if(dis>=100)//(intermsofcentimeter)
{
  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("TempValue:
");Serial.println(t);delay(1000);
//LED
ONif(t>=100)//(interms 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

