

Date	19 September 2022
Team ID	PNT2022TMID27152
ProjectName	Project-IoTBasedSafetyGadgetForChild SafetyMonitoring& Notification

SMART HOME

```
#include<Servo.h>
```

```
Servo s;
```

```
int t=2;
```

```
int e=3;
```

```
int l=11;
```

```
void setup()
```

```
{
```

```
pinMode(t,OUTPUT);
```

```
pinMode(e,INPUT);
```

```
pinMode(l,OUTPUT);
```

```
pinMode(13,OUTPUT);
```

```
pinMode(4,INPUT);
```

```
s.attach(5);
```

```
Serial.begin(9600);
```

```
}
```

```
void loop()
```

```
{
```

```
//ultrasonic sensor used to indicate BULB glowing and Door open(servo motor)
```

```
digitalWrite(t,1);  
digitalWrite(t,0);  
delayMicroseconds(10);  
digitalWrite(t,0);  
float dur=pulseIn(e,1);  
float dis=(dur*0.0343)/2;  
Serial.print("distance:");  
Serial.println(dis);  
if(dis>150){  
digitalWrite(l,0);  
s.write(180);  
}  
else{  
digitalWrite(l,1);  
s.write(0);  
}
```

```
//Temprature sensor
```

```
double a= analogRead(A0);  
double t= (((a/1024)*5)-0.5)*100;  
Serial.print("temprature value:");  
Serial.println(t);  
delay(1000);  
  
if(t>100)  
digitalWrite(13,1);  
else
```

```
digitalWrite(13,0);
```

```
delay(1000);
```

```
//PIR sensor
```

```
digitalWrite(13,0);
```

```
int a1=digitalRead(4);
```

```
Serial.println(a);
```

```
if(a1==1){
```

```
Serial.println("motion detected:");
```

```
digitalWrite(13,1);
```

```
}
```

```
delay(1000);
```

```
}
```

