**// C++ Code for Smart HOME using TEMP Sensor and PhotoResistor**

float x,y,z,temp;

void setup()

{

pinMode(8,INPUT);

pinMode(5,OUTPUT);

pinMode(6,OUTPUT);

pinMode(A5,INPUT);

pinMode(A6,INPUT);

Serial.begin(9600);

}

void loop()

{

x=digitalRead(8);

y=analogRead(A5);

z=analogRead(A4);

Serial.println(x);

Serial.println(y);

Serial.println(z);

temp =(double)z/1024;

temp = temp\*5;

temp = temp-0.5;

temp = temp\*100;

if ( (x>0) )

{

if ((y<550)&&(temp>30))

{

digitalWrite(5,HIGH);

digitalWrite(6,HIGH);

}

else if((y<550)&&(temp<30))

{

digitalWrite(5,HIGH);

digitalWrite(6,LOW);

}

else if((y>550)&&(temp>30))

{

digitalWrite(5,LOW);

digitalWrite(6,HIGH);

}

else if((y>550)&&(temp<30))

{

digitalWrite(5,LOW);

digitalWrite(6,LOW);

}

}

else

{

digitalWrite(5,LOW);

digitalWrite(6,LOW);

}

}

**OUTPUT :**

* **When Temparature is Higher than 30 ,The fan will automatically turned ON.**
* **When PIR detect darkness,The light turned ON automatically.**

