

Smart house

Project details: Submitted by: Rohit Sonar

Technology: IOT **Reg num: 718019Z342**

Domain: Smart solution for railways

[code]

```
const int hot = 87; //set hot parameter
```

```
const int cold = 75; //set cold parameter
```

```
int Buzz= 13; // Define Buzzer pin
```

```
int PIR= 4; // Define PIR pin
```

```
int val= 0; // Initializing the value as zero at the beginning
```

```
void setup() {
```

```
pinMode(A1, INPUT); //sensor
```

```
pinMode(12, OUTPUT); //red
```

```
pinMode(11, OUTPUT); //green
```

```
pinMode(10, OUTPUT); //blue
```

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

```
pinMode(Buzz, OUTPUT);
```

```
pinMode(PIR, INPUT);
```

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

```
}
```

```
void loop() {
```

```

int sensor = analogRead(A2);

float voltage = (sensor / 1024.0) * 5.0;

float tempC = (voltage - .5) * 100;

float tempF = (tempC * 1.8) + 32;

Serial.print("temp: ");

Serial.print(tempF);

if (tempF < cold) { //cold

digitalWrite(12, HIGH);

digitalWrite(11, LOW);

digitalWrite(10, LOW);

Serial.println(" It's Cold.");

}

if(val == HIGH){

digitalWrite(Buzz, HIGH); // Turn Buzzer ON

Serial.println("Movement Detected"); // Print this text in Serial Monitor

}

else if (tempF >= hot) { //hot

digitalWrite(12, LOW);

digitalWrite(11, LOW);

digitalWrite(10, HIGH);

Serial.println(" It's Hot.");

}

else { //fine

digitalWrite(12, LOW);

```

```
digitalWrite(11, HIGH);  
  
digitalWrite(10, LOW);  
  
Serial.println(" It's Fine.");  
  
  
digitalWrite(Buzz, LOW);  
  
Serial.println("Movement not Detected");  
  
  
}  
  
delay(1000);  
  
}  
  
}  
  
[/code]
```

Circuit diagram:

