

WOKWI Code for Home Automation:

```
#define BLYNK_TEMPLATE_ID "TMPL39q_q3i08"
#define BLYNK_TEMPLATE_NAME "Smart Home"
#define BLYNK_AUTH_TOKEN "hvXi_cfDTEbb0IZBKfzwIdSOF5z_MLJC"
#define BLYNK_PRINT Serial
```

```
#include <WiFi.h>
#include <WiFiClient.h>
#include <BlynkSimpleEsp32.h>
```

```
char auth[] = BLYNK_AUTH_TOKEN;
```

```
// Your WiFi credentials.
// Set password to "" for open networks.
char ssid[] = "Wokwi-GUEST";
char pass[] = "";
```

```
BlynkTimer timer;
```

```
#define button1_pin 26
#define button2_pin 25
#define button3_pin 33
#define button4_pin 32
```

```
#define relay1_pin 13
#define relay2_pin 12
#define relay3_pin 14
#define relay4_pin 27
```

```
int relay1_state = 0;
int relay2_state = 0;
int relay3_state = 0;
int relay4_state = 0;
```

```
//Change the virtual pins according the rooms
```

```
#define button1_vpin V1
#define button2_vpin V2
#define button3_vpin V3
#define button4_vpin V4
```

```
//-----
--
```

```
// This function is called every time the device is connected to the
Blynk.Cloud
```

```
// Request the latest state from the server
```

```

BLYNK_CONNECTED() {
  Blynk.syncVirtual(button1_vpin);
  Blynk.syncVirtual(button2_vpin);
  Blynk.syncVirtual(button3_vpin);
  Blynk.syncVirtual(button4_vpin);
}

//-----
// This function is called every time the Virtual Pin state change
//i.e when web push switch from Blynk App or Web Dashboard
BLYNK_WRITE(button1_vpin) {
  relay1_state = param.asInt();
  digitalWrite(relay1_pin, relay1_state);
}
//-----
BLYNK_WRITE(button2_vpin) {
  relay2_state = param.asInt();
  digitalWrite(relay2_pin, relay2_state);
}
//-----
BLYNK_WRITE(button3_vpin) {
  relay3_state = param.asInt();
  digitalWrite(relay3_pin, relay3_state);
}
//-----
BLYNK_WRITE(button4_vpin) {
  relay4_state = param.asInt();
  digitalWrite(relay4_pin, relay4_state);
}
//-----

void setup()
{
  // Debug console
  Serial.begin(115200);
  //-----
  pinMode(button1_pin, INPUT_PULLUP);
  pinMode(button2_pin, INPUT_PULLUP);
  pinMode(button3_pin, INPUT_PULLUP);
  pinMode(button4_pin, INPUT_PULLUP);
  //-----
  pinMode(relay1_pin, OUTPUT);
  pinMode(relay2_pin, OUTPUT);
  pinMode(relay3_pin, OUTPUT);
  pinMode(relay4_pin, OUTPUT);
  //-----
  //During Starting all Relays should TURN OFF
  digitalWrite(relay1_pin, HIGH);
}

```

[illegible]

[illegible]

