**Arduino code:**

#include <LiquidCrystal.h>

char inChar;

const int load1=4;

const int load2=5;

int sen1=6;

int sen2=7;

LiquidCrystal lcd(13, 12, 11, 10, 9, 8); digitalWrite(load1,HIGH)); digitalWrite(load2,LOW);

void setup() {

// setup code here, to run once:

pinMode(load1, OUTPUT);

pinMode(load2, OUTPUT);

digitalWrite(load1,HIGH);

digitalWrite(load2,HIGH);

pinMode(sen1,INPUT);

pinMode(sen2,INPUT);

lcd.begin(16, 2);

lcd.clear();

lcd.setCursor(0,0);

lcd.print("IOT BASED HOME");

lcd.setCursor(0,1);

lcd.print("AUTOMATION");

delay(500);

void loop() {

// main code here, to run repeatedly:

if(digitalRead(sen1)==LOW){

lcd.setCursor(0,0);

lcd.print("LOAD1: ON");

delay(500);

digitalWrite(load1,HIGH);

}

if(digitalRead(sen1)==HIGH){

lcd.setCursor(0,0);

lcd.print("LOAD1: OFF ");

delay(500);

digitalWrite(load1,LOW);

}

if(digitalRead(sen2)==LOW){

lcd.setCursor(0,1);

lcd.print("LOAD2: ON ");

delay(500);

digitalWrite(load2,HIGH);

}

if(digitalRead(sen2)==HIGH){

lcd.setCursor(0,1);

lcd.print("LOAD2: OFF ");

delay(500);

digitalWrite(load2,LOW);

}

}