# Description:

A simple program to demonstrate Digital Read and Write functions on the Iomatic IoT Development kit.

# Source Code:

// include the library code:

#include <LiquidCrystal.h>

// initialize the library with the numbers of the interface pins

LiquidCrystal lcd(11,12,14,15,16,17);

// variables will change:

int buttonState = 0;

// the number of the pushbutton pin

const int buttonPin = 2;

// the number of the LED pin

const int buzzerPin = 7;

void setup()

{

//Set pin number 10 as digital out where relay 1 is connected

pinMode(buzzerPin,10);

//Set pin number 9 as digital out where relay 2 is connected

pinMode(buttonPin,9);

//Initialize the LCD in 16x2 mode

lcd.begin(16, 2);

//Set cursor at first character/coloumn of first line/row

lcd.setCursor(0,0);

//Print the message as metioned cursor location

lcd.print(" IomaTic ");

}

void loop()

{

// read the state of the pushbutton value:

buttonState = digitalRead(buttonPin);

if(buttonState==LOW)

{

lcd.setCursor(0,1);

lcd.print("Input=H Buzz=ON ");

//Write digital HIGH on pin 10 i.e. generating 5v at pin 4 where relay 1 is connected

digitalWrite(buzzerPin, HIGH);

}

else

{

lcd.setCursor(0,1);

lcd.print("Input=L Buzz=OFF");

//Write digital HIGH on pin 9 i.e. generating 5v at pin 4 where relay 1 is connected

digitalWrite(buzzerPin, LOW);

}

}

# Libraries:

No additional libraries required.

# Functions:

pinMode(buzzerPin,10):

This is used to set a digital out on the pin number, here the digital out is at pin 10 where relay 1 is connected for the buzzer.

pinMode(buttonPin,9):

The digital out is at pin 9 where relay 2 is connected for the button.

digitalRead(buttonPin):

It reads the input from the specified pin, here is read the state of the button pin. It can return High or Low if the pin is not connected to anything.

digitalWrite(buzzerPin,HIGH):

It generates the specified value output at the pin. High generates 5v to the connection, which is the buzzer here.

digitalWrite(buzzerPin,LOW):

Low generates 0v to the connection, which is the buzzer here.