# Description:

A simple program to display ‘Hello World’ on the LCD connected to 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);

void setup()

{

// set up the LCD's number of columns and rows:

lcd.begin(16, 2);

}

void loop()

{

// Set LCD cursor at first character of first line.

lcd.setCursor(0,0);

// Print a message to the LCD.

lcd.print(" Hello ");

// Set LCD cursor at first character of second line.

lcd.setCursor(0,1);

// Print a message to the LCD.

lcd.print(" World ");

delay(2000);

//Clear LCD

lcd.clear();

delay(1000);

}

# Libraries:

LiquidCrystal.h :

It is a library which allows Arduino to control LCDs.

# Functions:

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

This is used to initialize the LCD and the numbers in the function must correspond to the pins the LCD is connected to. The Iomatic board has RS pin on 11 and Enable(Vin) pin on 12 and 14,15,16,17 have D0,D1,D2,D3 respectively.

lcd.begin(16,2):

This sets up the number of rows and columns in the LCD connected to the Arduino board, in this example the LCD has 16 rows and 2 columns.

lcd.setCursor(0,0):

This sets the cursor of the LCD at the desired location, here it sets the cursor to the initial position on the first column.

lcd.setCursor(0,1):

This sets the cursor on the initial position on the second column.

lcd.print():

It prints the desired message on the LCD.

lcd.clear();

It clears all messages on the LCD.

delay(2000);

It causes a delay between the loops based on the amount written in it in milliseconds. Here it delays the loops by 2000 milliseconds or 2 seconds.