# Description:

Write a program to make call on digital input.

# 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);

char PhoneNo[]="+91xxxxxxxxxx";

int DialStatus=0;

// variables will change:

int buttonState = 0;

// the number of the pushbutton pin

const int buttonPin = 2;

void setup()

{

pinMode(buttonPin,INPUT\_PULLUP);

//SIM800 wakeup connected on pin 13 in IomaTic board

pinMode(13,OUTPUT);

//Initialize the SIM800 Module

digitalWrite(13, HIGH);

delay(1000);

//Sending wake up signal to SIM800 Module

digitalWrite(13, LOW);

delay(1000);

//Keeping SIM800 in active/wakeup state

digitalWrite(13, HIGH);

delay(10000);

//Initialize the LCD in 16x2 mode

lcd.begin(16, 2);

delay(1000);

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

lcd.setCursor(0,0);

//Print the message as mentioned cursor location

lcd.print(" IomaTic ");

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

lcd.setCursor(0,1);

//Print the message as metioned cursor location

lcd.print("GSM Dial on Input....");

//Initialize a serial communication with baud rate 9600

Serial.begin(9600);

delay(1000);

}

void loop()

{

//This is single task program hence nothing to do in loop,

//everything will be executed in setup function only.

// read the state of the pushbutton value:

buttonState = digitalRead(buttonPin);

if(buttonState==LOW)

{

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

lcd.setCursor(0,1);

//Print the message as mentioned cursor location

lcd.print("Input State=HIGH ....");

if(DialStatus==0)

{

//Initialize the GSM modem

Serial.println("AT");

delay(2000);

//Send dial a phone AT command

Serial.print("ATD");

//Send phone number to dial

Serial.print(PhoneNo);

Serial.print(";");

Serial.print("\r\n");

DialStatus=1;

}

}

else

{

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

lcd.setCursor(0,1);

//Print the message as mentioned cursor location

lcd.print("Input State=LOW ....");

DialStatus=0;

}

}

# Libraries:

*LiquidCrystal.h:*

It is a library which allows Arduino to control LCDs.

# Functions:

*AT Commands:*

AT Commands are commands which are used to control the modems where AT stands for Attention.