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***COURSE:*** *COMPUTER ARCHITECTURE* ***(LAB)***

***TASK #:*** *3*

***SUBMITTED TO:*** *SIR ABUZAR ZAFAR*

***ANSWER # 1:***

***CODE:***

*#include <LiquidCrystal.h>*

*LiquidCrystal lcd(12, 11, 5, 4, 3, 2);*

*void setup() {*

*lcd.begin(16, 2);*

*Serial.begin(9600);*

*}*

*void loop() {*

*if(Serial.available()){*

*lcd.write(Serial.read());*

*lcd.noDisplay();*

*delay(500);*

*lcd.display();*

*delay(500);*

*}*

*}*

***ANSWER # 1:***

* *8 BITS (16x2) LCD has 8 data pins so they accept 8 bit data in which we can send character or ASCII value to LCD.*
* *4 BITS (16x2) LCD we only use 4 data pins 8 bit character or ASCII divides in to two 4 bit nibbles. High nibble sent first then lower nibble.*

***ANSWER # 2:***

* *The advantage of using 4 bit programming then 8 bit is that we only use four data pins and rest of 4 pins can be use to connect other components to LCD.*