

# printing sum of two numbers on LCD

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## 1 Abstract

-Through this manual, we learn how to display sum of two numbers on LCD

## 2 components

| components  | values | quantity |
|-------------|--------|----------|
| Resistor    | 220ohm | 1        |
| Arduino     | UNO    | 1        |
| LCD         | 16x2   | 1        |
| bread board | -      | 1        |
| jump wires  | -      | 20       |

TABLE I

### step 1

-Connect the 5V pin of the Arduino to an extreme pin of the Breadboard Let this pin be V cc .

### step 2

-Connect the GND pin of the Arduino to the opposite extreme pin of the Breadboard.

### step 3

-plug the LCD in fig.7 to breadboard

### step 4

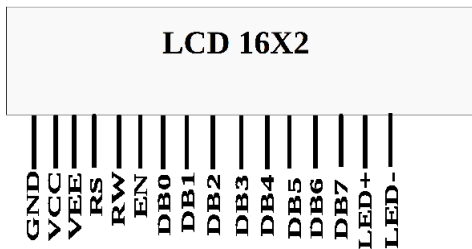
-Connect the 220Ohm resistance from Vcc to pin 15 (Led+) of the LCD.

### step 5

-Connect the arduino to the computer so that it is powered.

TABLE II :Arduino to LCD connections

| Arduino pins | LCD pins | LCD pin label | LCD pin Description |
|--------------|----------|---------------|---------------------|
| GND          | 1        | GND           |                     |
| 5V           | 2        | Vcc           |                     |
| GND          | 3        | Vee           | Contrast            |
| D12          | 4        | RS            | Register Select     |
| GND          | 5        | R/W           | read/write          |
| D11          | 6        | EN            | Enable              |
| D5           | 11       | DB4           | Serial connection   |
| D4           | 12       | DB5           | Serial connection   |
| D3           | 13       | DB6           | Serial connection   |
| D2           | 14       | DB7           | Serial connection   |
| 5V           | 15       | LED+          | Backlight           |
| GND          | 16       | LED-          | Backlight           |



```
//printing on LCD
lcd.print("the sum is");
lcd.setCursor(1,7);
lcd.print(sum);
}
void loop(){

}
```

## step 6

-make the Arduino to LCD pin connections as show in table II

## Result

-on LCD display you will get the sum of numbers you entered in serial monitor

## step 7

-Open the Arduino IDE and type the following code.Open the serial monitor to enter the inputs

```
#include <LiquidCrystal.h>
LiquidCrystal lcd(12,11,5,4,3,2);//arduino pins connected to LCD
int n1,n2;      //initializing input variables
int sum;        //initializing sum variable
void setup()
{
  lcd.begin(16, 2);
  lcd.setCursor(0, 0);

  Serial.begin(9600);

  //diplaying in serial monitor
  Serial.println("Enter two numbers:");
  while (Serial.available() == 0) {}
  //taking first input through serial monitor
  n1= Serial.parseInt();

  //taking second input through serial monitor
  while (Serial.available() == 0) {}
  n2 = Serial.parseInt();

  //required sum
  sum=n1+n2;
```