

Name - Khushi Nitinkumar Patel.

PRN - 2020BTECS00037

Experiment no. 7

→ Aim : LCD interfacing with Arduino.

- LCD module

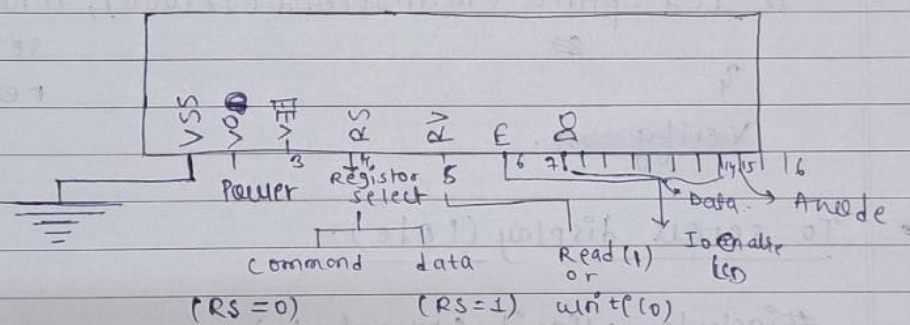
16 columns & 2 rows (i.e. 16x2 size).

(Data sheet required) operating range (4.7-5.3).

LCD each character is in 5x8 pixels.

(eg:- 4 bit or 8 bit mode).

- LCD pinout



Display + Text "Hello World" on LCD (4 bit)

RS = 12, RW = ground, E = 11,

D4 → 5 to D7 → 2.

code

```
#include <liquid crystal.h>
```

```
liquid crystal LCD (12, 11, 5, 4, 3, 2)
```

```
void setup() {
```

```
  lcd.begin(16, 2); // set LCD No. of c & R.
```

```
  lcd.print("Hello, world"); // Print msg)
}
```

```
void loop() {
```

```
  // set cursor to column '0', line 1
```

```
  // (note : line 1 is 2nd row, because  
  counting begins at 0)
```

```
  lcd.setCursor(0, 1);
```

```
  // lcd.print(millisecond()/1000); // number
```

sec because
reset.

```
}
```

Verify use.

- To scroll display (code).

```
#include <liquid crystal.h>
```

```
liquid crystal LCD (12, 11, 5, 4, 3, 2);
```

```
void setup() {
```

```
  lcd.begin(16, 2);
```

```
  lcd.print("16 x 2 LCD module & ARDUINO UNO");
```

```
void loop()
```

```
{
```

```
  for (pos = 0; pos < 2; pos++)
```

```
  {
```

```
    lcd-scroll display left(); //scroll display  
    left
```

```
  }
```

```
  delay (500);
```

```
}
```