

Practical No.24: Interface arduino with LCD

I Practical Significance

Arduino is a prototype platform (open-source) based on an easy-to-use hardware and software. It consists of a circuit board, which can be programmed (referred to as a microcontroller) and a ready-made software called Arduino IDE (Integrated Development Environment), which is used to write and upload the computer code to the physical board.. Almost all applications and projects are being developed with this platform. These arduino based practical will be useful for development of skills and building need based applications

II Practical Outcome/s

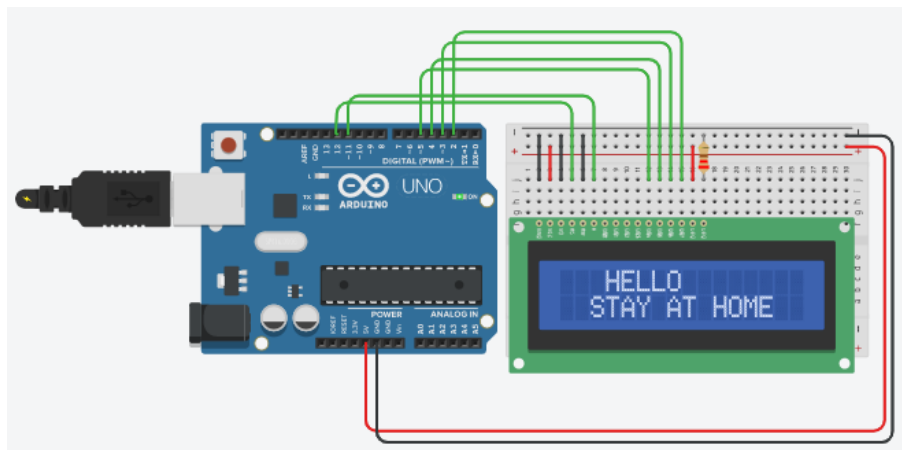
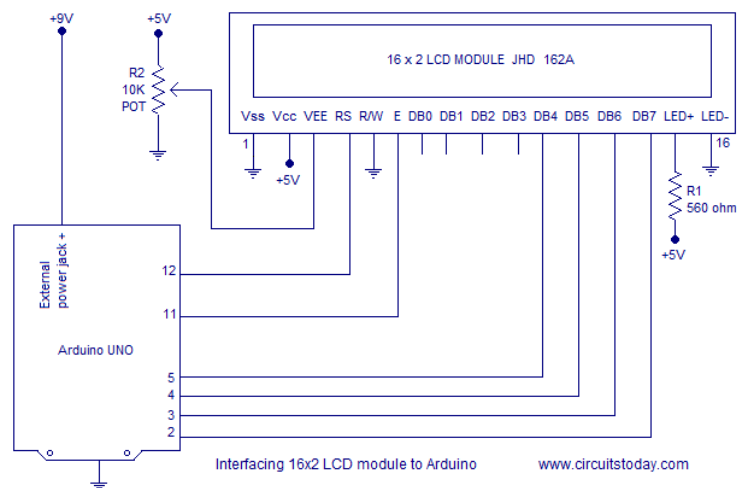
Interface 16 x 2 LCD to Arduino UNO. Execute embedded C language program to display string on it..

III Relevant Affective domain related Outcome(s)

- Handle IC and equipment carefully.
- Follow safe practices.

IV Minimum Theoretical Background

Use the manual of Arduino



```
#include<LiquidCrystal.h>
```

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

```
void setup()
```

```
{
```

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

```
}
```

```
void loop()
```

```
{
```

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

```
  lcd.print("  HELLO");
```

```
  lcd.setCursor(2,1);
```

```
  lcd.print("STAY AT HOME");
```

```
}
```

DIAGRAM / flowchart/algorithm : --

V Resources Required: Arduino board , desktop pc and components

VI Precautions to be Followed: Create the separate directory with specific name.

VII Actual procedure followed:

Write the program that you have written and executed for the trainer board in lab

Use separate page

VIII Interpretation of results

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IX Conclusions

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X Practical Related Questions

1. State the value of resistor used in series with LED
2. Write code to increase or decreases the fading with faster rate

[Space for answer]

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