

Arduino with LCD

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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IIT Bombay

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Learning Objectives

We will learn how to



Learning Objectives

We will learn how to

- **Connect an LCD to Arduino board**



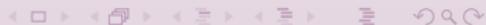
Learning Objectives

We will learn how to

- **Connect an LCD to Arduino board**
- **Write a program to display a text message on the LCD**



Pre-requisites



Pre-requisites

- **Basic knowledge of Electronics**



Pre-requisites

- **Basic knowledge of Electronics**
- **Basic knowledge of C or C++ programming language**



System Requirements



System Requirements

- **Arduino UNO Board**



System Requirements

- **Arduino UNO Board**
- **Ubuntu Linux 14.04 OS**

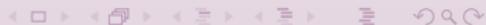


System Requirements

- **Arduino UNO Board**
- **Ubuntu Linux 14.04 OS**
- **Arduino IDE**



External devices



External devices

- **LCD 16X2**



External devices

- **LCD 16X2**
- **Potentiometer**



External devices

- **LCD 16X2**
- **Potentiometer**
- **Breadboard**



External devices

- **LCD 16X2**
- **Potentiometer**
- **Breadboard**
- **Pin header**

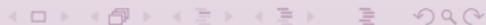


External devices

- **LCD 16X2**
- **Potentiometer**
- **Breadboard**
- **Pin header**
- **Jumper Wires**



External devices



External devices

- **Soldering Iron**



External devices

- **Soldering Iron**
- **Soldering Stand**



External devices

- **Soldering Iron**
- **Soldering Stand**
- **Soldering Lead**



External devices

- Soldering Iron
- Soldering Stand
- Soldering Lead
- Soldering Paste



Summary

In this tutorial we learnt to:

- **Connect an LCD to Arduino board**
- **Write a program to display a text message on LCD**



Assignment

- Change the same program to display the text **"Hello World"** in the second row
- Place the cursor in the 4th column
- Compile and upload the program
- Observe the text displayed in the LCD



About the Spoken Tutorial Project

- Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- It summarises the Spoken Tutorial project
- If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- Conducts workshops using spoken tutorials
- Gives certificates to those who pass an online test
- For more details, please write to contact@spoken-tutorial.org



Forum for specific questions

- Do you have questions in **THIS Spoken Tutorial?**
- Please visit <http://forums.spoken-tutorial.org>
- Choose the minute and second where you have the question
- Explain your question briefly
- Someone from our team will answer them



Acknowledgements

- **Spoken Tutorial Project is a part of the Talk to a Teacher project**
- **It is supported by the National Mission on Education through ICT, MHRD, Government of India**
- **More information on this Mission is available at**

<http://spoken-tutorial.org/NMEICT-Intro>

