

Arduino Components and IDE

Spoken Tutorial Project

<http://spoken-tutorial.org>

National Mission on Education through ICT

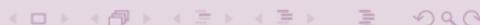
<http://sakshat.ac.in>

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Recreated By: Spoken Tutorial Team

IIT Bombay

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Learning Objectives

We will learn about



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We will learn about

- Set up a physical connection between Arduino and a computer



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- **Arduino programming language**



System Requirements



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- **Ubuntu Linux 14.04 OS**



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- **Arduino IDE**



Pre-requisites

- **Basic knowledge of Electronics**



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Arduino Connection



Arduino Programming Language

Control Statements	Operators	Functions
if if..else for while do..while switch..case	+, -, *, /, <, >, <=, >=, <>, &&, , !	pinMode() digitalWrite() digitalRead() delay() analogRead() analogWrite()



Summary

In this tutorial we learnt about,

- **Set up a physical connection between the Arduino and computer**
- **Arduino hardware**
- **Arduino programming language**



Assignment

- Open the Arduino IDE
- Click on the **Help** menu and select **reference**
- Go through the built-in functions such as `delay()`, `pinMode()`, `digitalRead()` etc.



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>

