

Arduino with Tricolor LED and Push-button

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 how to



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- **Connect a tricolor LED to Arduino board**



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- **Write a program to blink tricolor LED**



Learning Objectives

We will learn how to

- Connect a tricolor LED to Arduino board
- Write a program to blink tricolor LED
- Use Pushbutton to control the blinking



System Requirements



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- **Arduino UNO Board**



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- **Ubuntu Linux 14.04 OS**



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



External devices



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- **Tricolor LED**



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- **Tricolor LED**
- **Resistor**



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- **Tricolor LED**
- **Resistor**
- **Breadboard**



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- Tricolor LED
- Resistor
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- Jumper Wires



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Pre-requisites



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- **Basic knowledge of Electronics**



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



Tricolor LED



Tricolor LED



Resistor



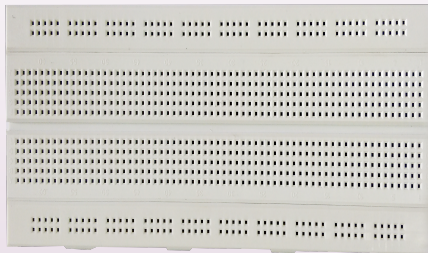
Resistor



Breadboard



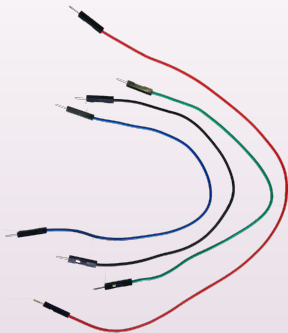
Breadboard



Jumper Wires



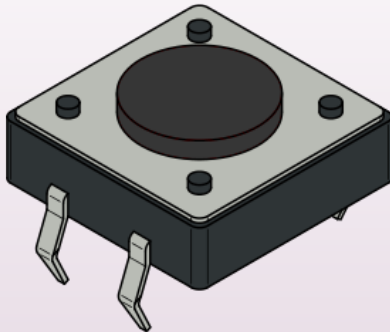
Jumper Wires



Pushbutton



Pushbutton



Summary

In this tutorial we learnt to:

- **Connect the tricolor LED to Arduino board**
- **Write a program to blink tricolor LED**
- **Use Pushbutton to control the blinking**



Assignment

- **Change the same program in the opposite way**
- **If the button is pressed, keep the input as LOW**
- **Compile and upload the program**
- **Observe the blinking in the tricolor LED**



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

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- 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>

