

# Series and Parallel Resistance

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

Spoken Tutorial & FOSSEE Team  
IIT Bombay

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# Learning Objectives



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**We will learn how**



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- **Voltage and Current characteristics behave in series and parallel circuits**



# System Requirement



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- **Ubuntu Linux 20.04 OS**



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- **CircuitJS Application**



# Pre-requisites



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To follow this tutorial, you should have basic knowledge of

- **Electrical Circuits**



# Series Resistance



# Series Resistance



# Parallel Resistance



# Parallel Resistance



# Assignment - Series Resistance

- 1 In the same circuit, change the value of resistors as  $R1 = 4K$  Ohms,  $R2 = 2K$  Ohms,  $R3 = 100$  Ohms
- 2 Change the DC power supply voltage to 5 Volts
- 3 Notice the current flowing and voltage drop at each resistor



# Assignment - Parallel Resistance

- 1 Change the DC voltage supply value to 5 Volts
- 2 Notice the change in voltage and current for each resistor



# Summary

**In this tutorial, we learnt how**

- To connect Resistors in series and parallel circuits**
- Voltage and current characteristics behave in series and parallel circuits**



# About the Spoken Tutorial Project

- Watch the video available at [https://spoken-tutorial.org/What\\_is\\_a\\_Spoken\\_Tutorial](https://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](mailto:contact@spoken-tutorial.org)





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# Thank You

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