

# Plotting Histograms and Pie Chart

**Spoken Tutorial Project**

**<https://spoken-tutorial.org>**

**National Mission on Education through ICT**

**<http://sakshat.ac.in/>**

**Script: Tushar Bajaj**

**Narration: Sudhakar Kumar**

**IIT Bombay  
1 April 2019**



# Learning Objectives

**We will learn how to:**



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We will learn how to:

- ▶ Plot histograms



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**We will learn how to:**

- ▶ **Plot histograms**
- ▶ **Plot pie chart**



# Learning Objectives

**We will learn how to:**

- ▶ **Plot histograms**
- ▶ **Plot pie chart**
- ▶ **Save plots**



# Pre-requisites



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- ▶ **Data frames in R**



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- ▶ **Data frames in R**
- ▶ **Basics of Statistics**



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- ▶ Data frames in R
- ▶ Basics of Statistics

Please locate the relevant tutorials on  
<https://spoken-tutorial.org/>



# System Specifications



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- ▶ **Ubuntu Linux OS v 16.04**



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- ▶ **R v 3.4.4**



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- ▶ **RStudio v 1.1.456**



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**R version 3.2.0 or higher**



# Download Files

**We will use:**



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We will use:

- ▶ A data frame `moviesData.csv`



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We will use:

- ▶ A data frame `moviesData.csv`
- ▶ A script file `myPlots.R`



# Download Files

We will use:

- ▶ A data frame [moviesData.csv](#)
- ▶ A script file [myPlots.R](#)

Download these files from the [Code files](#) link of this tutorial



# Histogram

**A histogram is**



# Histogram

**A histogram is**

- ▶ **A visual representation of the distribution of a dataset**



# Histogram

**A histogram is**

- ▶ **A visual representation of the distribution of a dataset**
- ▶ **Used to plot the frequency of score occurrences in a continuous dataset**



# Pie Chart

**A pie chart is**



# Pie Chart

**A pie chart is**

- ▶ **A circular chart**



# Pie Chart

**A pie chart is**

- ▶ **A circular chart**
- ▶ **Divided into wedge-like sectors, illustrating proportion**

**The total value of the pie is always 100 percent**



# Summary

We have learnt how to:

- ▶ Plot histograms
- ▶ Plot pie chart
- ▶ Save plots



# Assignment

1. Read the file *moviesData.csv*  
Create a histogram of the object named *imdb\_num\_votes* in this file
2. Create a pie chart of the object *mpaa\_rating*
3. Save both the plots



# About the Spoken Tutorial Project

- ▶ Watch the video available at [http://spoken-tutorial.org/What\\_is\\_a\\_Spoken\\_Tutorial](http://spoken-tutorial.org/What_is_a_Spoken_Tutorial)
- ▶ It summarises the Spoken Tutorial project



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- ▶ 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)





# Forum to answer questions

- ▶ Questions not related to the Spoken Tutorial?
- ▶ Do you have general / technical questions on the Software?
- ▶ Please visit the FOSSEE Forum  
<http://forums.fossee.in/>
- ▶ Choose the Software and post your question



# Textbook Companion Project

- ▶ **The FOSSEE team coordinates coding of solved examples of popular books**
- ▶ **We give honorarium and certificates to those who do this**

**For more details, please visit these sites:**

<https://r.fossee.in/>  
<https://fossee.in/>



# 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>



# Thank You

- ▶ **The script for this tutorial was contributed by Tushar Bajaj (TISS Mumbai)**
- ▶ **The video has been created by Sudhakar Kumar, IIT Bombay**

