

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
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Learning Objectives

We will learn how to:



Learning Objectives

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



Pre-requisites

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



Pre-requisites

- ▶ 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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R version 3.2.0 or higher



Download Files

We will use:



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We will use:

- ▶ A data frame **moviesData.csv**



Download Files

We will use:

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



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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
- ▶ It summarises the Spoken Tutorial project



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- ▶ **Gives certificates to those who pass an online test**
- ▶ **For more details, please write to contact@spoken-tutorial.org**



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- ▶ Do you have questions in **THIS Spoken Tutorial?**
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- ▶ Explain your question briefly
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- ▶ We give honorarium and certificates to those who do this

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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>



Thank You

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- ▶ The video has been created by Sudhakar Kumar, IIT Bombay