

Logical & Other Operators

Talk to a Teacher

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objectives

- **Logical Operators**



Learning Objectives

- Logical Operators
- Parallel assignment



Learning Objectives

- Logical Operators
- Parallel assignment
- Range Operators



System Requirement



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- **Ubuntu Linux version 12.04**



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- **Ruby 1.9.3**



Pre-requisites



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- Knowledge of Terminal and Text editor



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- **Also, be familiar with **irb****



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- Knowledge of **Terminal** and **Text editor**
- Also, be familiar with **irb**
- If not, for relevant tutorials, please visit <http://spoken-tutorial.org>



Logical Operators

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Boolean Operators



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- **because they evaluate parts of an expression**



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- **return true or false value**



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- because they evaluate parts of an expression
- return **true** or **false** value
- **&&** (**and**)



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- return **true** or **false** value
- **&&** (and)
- **||** (or)



Logical Operators

Logical Operators are also known as **Boolean Operators**

- because they evaluate parts of an expression
- return **true** or **false** value
- **&&** (and)
- **||** (or)
- **!** (**not**)



Logical Operators

- **&& and and**

Eg : $\langle \text{Expresion1} \rangle \&\& \langle \text{Expression2} \rangle$
 $\langle \text{Expresion1} \rangle \text{ and } \langle \text{Expression2} \rangle$



Logical Operators

- **|| and or**

Eg : $\langle \text{Expresion1} \rangle \parallel \langle \text{Expression2} \rangle$
 $\langle \text{Expresion1} \rangle \text{ or } \langle \text{Expression2} \rangle$



Logical Operators

- **!** and **not**

Eg: $! < Expression >$

$not < Expresion >$



Parallel assignment

- Multiple variables can be initialized



Parallel assignment

- Multiple variables can be initialized
- with a single line of Ruby code



Parallel assignment

- Multiple variables can be initialized
- with a single line of Ruby code
- **through parallel assignment**



Range

- The values in a range can be



Range

- The values in a range can be
 - numbers



Range

- The values in a range can be
 - numbers
 - **characters**



Range

- The values in a range can be
 - numbers
 - characters
 - **strings**



Range

- The values in a range can be
 - numbers
 - characters
 - strings
 - **objects**



Range

- The values in a range can be
 - numbers
 - characters
 - strings
 - objects
- Range can be used to express a sequence



Sequence Range

- **Sequence range is used to create a range of successive values**



Sequence Range

- Sequence range is used to create a range of successive values
- Consisting of start value, range of values and end value



Sequence Range

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- **(..)** two dot operator - inclusive range



Sequence Range

- Sequence range is used to create a range of successive values
- Consisting of start value, range of values and end value
- **(..)** two dot operator - inclusive range
- **(...)** three dot operator- exclusive range



Range Interval

- **Ranges are used to identify whether a value falls within a particular range**



Range Interval

- Ranges are used to identify whether a value falls within a particular range
- We do this using `===`, the equality operator



Summary

- **Logical operator**

$\&\&, ||, !$

- **Parallel assignment**

$Ex : a, b, c = 10, 20, 30$

- **Range Operators**

- **Inclusive operator** $..$
- **Exclusive operator** $...$



Assignment

- **Declare two variables using parallel assignment**
- **Check whether their sum lies between 20 and 50**



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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



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- More information on this Mission is available at <http://spoken-tutorial.org/NMEICT-Intro>

