

# Using final keyword

Talk to a Teacher

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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# Learning Objectives



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We will learn about

- **the final keyword and when to invoke it**



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We will learn about

- the **final keyword** and when to invoke it
- **final variables**



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We will learn about

- the **final keyword** and when to invoke it
- final variables
- **final methods**



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We will learn about

- the **final keyword** and when to invoke it
- final variables
- final methods
- **final classes**



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# Software Requirements



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- **Ubuntu 12.04**





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- Ubuntu 12.04
- **JDK 1.7**



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- Ubuntu 12.04
- JDK 1.7
- Eclipse 4.3.1



# Prerequisite



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- **Basic knowledge of Java and Eclipse IDE**



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- Basic knowledge of Java and Eclipse IDE
- Knowledge of Subclassing and Method overriding



# Prerequisite

- Basic knowledge of Java and Eclipse IDE
- Knowledge of **Subclassing** and **Method overriding**
- **For relevant tutorials, please visit**  
<http://www.spoken-tutorial.org>



# What is final keyword?



# What is final keyword?

- **final** is a keyword or reserved word in Java





# What is final keyword?

- **final** is a keyword or reserved word in Java
- It can be applied to variables, methods or classes



# What is final variable?



# What is final variable?

`final` variable is

- a variable whose value cannot be changed



# What is final variable?

final variable is

- a variable whose value cannot be changed
- It will be a constant



# final variable as static



# final variable as static

- **static final variables cannot be initialized in a constructor**



# final variable as static

- **static final variables** cannot be initialized in a constructor
- **They must be assigned a value with their declaration**



# final variable as static

- **static final variables** cannot be initialized in a constructor
- They must be assigned a value with their declaration
- **They must be declared in a static block**





# final variable as static



# final variable as static

- **static variables are shared among all the objects of a class**



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# final variable as static

- **static** variables are shared among all the objects of a class
- **Creating a new object would change the static variable**



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# final variable as static

- **static** variables are shared among all the objects of a class
- Creating a new object would change the **static variable**
- **This is not allowed if the static variable is final**



# final and private method



# final and private method

- **private methods are not inherited by the child class**



# final and private method

- **private methods** are not inherited by the child class
- **So we can add a method** `getDetails()` **in the child class**



# final and private method

- **private methods** are not inherited by the child class
- So we can add a method `getDetails()` in the child class
- You can try this as an assignment





# Summary

- When to invoke **final keyword**
- What are:
  - final variables
  - final methods
  - final classes



# Assignment

- Repeat the steps of Using final keyword tutorial for the **Bike** and **Vehicle** class
- Write down the classes in java that are **final** classes



# 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)



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

