

Using final keyword

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National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objectives



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Learning Objectives

We will learn about

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



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Learning Objectives

We will learn about

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



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Learning Objectives

We will learn about

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



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Learning Objectives

We will learn about

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



Software Requirements



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Software Requirements

- **Ubuntu 12.04**



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Software Requirements

- Ubuntu 12.04
- **JDK 1.7**



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Software Requirements

- Ubuntu 12.04
- JDK 1.7
- Eclipse 4.3.1



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Prerequisite



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Prerequisite

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



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Prerequisite

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



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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?



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What is final keyword?

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



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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?



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What is final variable?

final variable is

- a variable whose value cannot be changed



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What is final variable?

final variable is

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



final variable as static



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final variable as static

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



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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**



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final variable as static



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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**



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final and private method



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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



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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



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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
- It summarises the Spoken Tutorial project



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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>



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