Core Java

1 Java IO: Files

Create a file

Construct file path

Set the file permission

Read file with BufferedInputStream

Read file with BufferedReader

Write file with FileOutputStream

Write file with BufferedWriter

Append content to file

Delete a file

Delete files with certain extension only

Find files with certain extension only

Rename a file

Copy a file

Move a file to another directory

Get the file creation date

Get the file last modified date

Change the file last modified date

Make a file read only

Get file size

Get the filepath of a file

Get the total number of lines of a file

Check if a file exists

Check if a file is hidden

Read UTF-8 encoded data from a file

Write UTF-8 encoded data into a file

Assign file content into a variable

Generate a file checksum value

Convert File into an array of bytes

Convert array of bytes into File

Convert String to InputStream

Convert InputStream to String

Convert File to Hex

Get total of free disk space in your partition or volume

2 Exception Handling

What Is an Exception? Using Identifiers

The Catch or Specify RequirementUsing Variables

How to Throw Exceptions

The try-with-resources Statement

Unchecked Exceptions — The Controversy

Advantages of Exceptions

3 Collections

ArrayList class

LinkedList class

ListIterator interface

HashSet class

LinkedHashSet class

TreeSet class

PriorityQueue class

Map interface

HashMap class

LinkedHashMap class

TreeMap class

Hashtable class

Sorting

Comparable interface

Comparator interface

Properties class in Java

4 Generics

Java Generics Example

Generics with Class and Interfaces

Generics Type Naming Convention

Generics in Methods and Constructors

Generics Bounded Type Parameters

Generics and Inheritance

Generic Classes and Subtyping

Generics Wildcards

Generics Upper Bounded Wildcard

Generics Unbounded Wildcard

Generics Lower bounded Wildcard

Subtyping using Generics Wildcard

Type Erasure

5 Threads

Creating Threads

Using Runnable

Synchronization

wait, notifyAll, and notify

Details of Waiting and Notification

Thread Scheduling

Deadlocks

Ending Thread Execution