

# Java SE 8 Programmer I and II Syballus( Paper codes : 1z0-808 & 1z0-809)

## Java SE 8 Programmer 1 , also called OCJA 8.0

**Exam Number:** 1Z0-808

**Associated Certifications:** Oracle Certified Associate, Java SE 8 Programmer

### Java Basics

- Define the scope of variables
- Define the structure of a Java class
- Create executable Java applications with a main method
- Import other Java packages to make them accessible in your code

### Working With Java Data Types

- Declare and initialize variables
- Differentiate between object reference variables and primitive variables
- Read or write to object fields
- Explain an Object's Lifecycle (creation, "dereference" and garbage collection)
- Call methods on objects
- Manipulate data using the StringBuilder class and its methods
- Creating and manipulating Strings

### Using Operators and Decision Constructs

- Use Java operators
- Use parenthesis to override operator precedence
- Test equality between Strings and other objects using == and equals ()
- Create if and if/else constructs
- Use a switch statement

### Creating and Using Arrays

- Declare, instantiate, initialize and use a one-dimensional array
- Declare, instantiate, initialize and use multi-dimensional array
- Declare and use an ArrayList

### Using Loop Constructs

- Create and use while loops
- Create and use for loops including the enhanced for loop
- Create and use do/while loops
- Compare loop constructs
- Use break and continue

### Working with Methods and Encapsulation

- Create methods with arguments and return values

### Highlights of the Certifications

- International Certification
- Ensures Complete knowledge of Core + Advanced Java
- Adds value to your Resume

**For any technical Queries  
Contact Rocky Sir @ 98925 44177**

### Why learn From Rocky Sir Only?

- Corporate Trainer to about 17 IT companies Including 2 MNCs
- Teaches with Practical Approach
- Online Practice test at SCTPL Test Center.
- His Company SCTPL is an Official member to Monster India ( largest Job Portal )
- **He trains and places his students.**
- Best placement till date at **FaceBook.com** at start package of **11.5 LPA**
- After Training each student is tested and then awarded Monster India Member COC
  - COC -> Certificate Of Completion

**See Batch schedules from  
<http://ocpip.suven.net>**

Students completing Java and Database Track from SCTPL would get 100% placement calls

## Java SE 8 Programmer I and II Syballus( Paper codes : 1z0-808 & 1z0-809)

- Apply the static keyword to methods and fields
- Create an overloaded method
- Differentiate between default and user defined constructors
- Create and overload constructors
- Apply access modifiers
- Apply encapsulation principles to a class
- Determine the effect upon object references and primitive values when they are passed into methods that change the values

### Working with Inheritance

- Implement inheritance
- Develop code that demonstrates the use of polymorphism
- Differentiate between the type of a reference and the type of an object
- Determine when casting is necessary
- Use super and this to access objects and constructors
- Use abstract classes and interfaces

### Handling Exceptions

- Differentiate among checked exceptions, RuntimeExceptions and Errors
- Create a try-catch block and determine how exceptions alter normal program flow
- Describe what Exceptions are used for in Java
- Invoke a method that throws an exception
- Recognize common exception classes and categories

### Working with Selected classes from the Java API

- Manipulate data using the StringBuilder class and its methods
- Create and manipulate Strings
- Write a simple Lambda expression that consumes a Lambda Predicate expression

## Java SE 8 Programmer 2, also called OCJP 8.0

**Exam number:** 1Z0-809

**Associated Certification:** Oracle Certified Professional, Java SE 8 Programmer (OCPJP)

#### Java Class Design

- Use access modifiers: private, protected, and public
- Override methods
- Overload constructors and methods
- Use the instanceof operator and casting
- Use virtual method invocation
- Override the hashCode, equals, and toString methods from the Object class to improve the functionality of your class.
- Use package and import statements

#### Advanced Class Design

Students completing Java and Database Track from SCTPL would get 100% placement calls

**For any technical Queries  
Contact Rocky Sir @ 98925 44177**

**See Batch schedules from  
<http://ocjp.suven.net>**

### Highlights of the Certifications

- International Certification
- Ensures Complete knowledge of Core and Advanced Java
- Adds value to your Resume

# Java SE 8 Programmer I and II Syballus( Paper codes : 1z0-808 & 1z0-809)

- Identify when and how to apply abstract classes
- Construct abstract Java classes and subclasses
- Use the static and final keywords
- Create top-level and nested classes
- Use enumerated types

## Object-Oriented Design Principles

- Write code that declares, implements and/or extends interfaces
- Choose between interface inheritance and class inheritance
- Apply cohesion, low-coupling, IS-A, and HAS-A principles
- Apply object composition principles (including has-a relationships)
- Design a class using a Singleton design pattern
- Write code to implement the Data Access Object (DAO) pattern
- Design and create objects using a factory pattern

## Generics and Collections

- Create a generic class
- Use the diamond for type inference
- Analyze the interoperability of collections that use raw types and generic types
- Use wrapper classes, autoboxing and unboxing
- Create and use List, Set and Deque implementations
- Create and use Map implementations
- Use java.util.Comparator and java.lang.Comparable
- Sort and search arrays and lists

## String Processing

- Search, parse and build strings (including Scanner, StringTokenizer, StringBuilder, String and Formatter)
- Search, parse, and replace strings by using regular expressions, using expression patterns for matching limited to: . (dot), \* (star), + (plus), ?, \d, \D, \s, \S, \w, \W, \b, \B, [], ().
- Format strings using the formatting parameters: %b, %c, %d, %f, and %s in format strings.

## Exceptions and Assertions

- Use throw and throws statements
- Develop code that handles multiple Exception types in a single catch block
- Develop code that uses try-with-resources statements (including using classes that implement the AutoCloseable interface)
- Create custom exceptions
- Test invariants by using assertions

## Java I/O Fundamentals

- Read and write data from the console
- Use streams to read from and write to files by using classes in the java.io package including BufferedReader, BufferedWriter, File, FileReader, FileWriter, DataInputStream, DataOutputStream, ObjectOutputStream, ObjectInputStream, and PrintWriter

## Java File I/O (NIO.2)

- Operate on file and directory paths with the Path class
- Check, delete, copy, or move a file or directory with the Files class
- Find a file with the PathMatcher interface

## Why learn From Rocky Sir ?

- Corporate Trainer to about 17 IT companies Including 2 MNCs
- Teaches with Practical Approach
- Online Practice test at SCTPL Test Center.
- His Company SCTPL is an Official member to Monster India ( largest Job Portal )
- **He trains and places his students.**
- Best placement till date at **FaceBook.com** at start package of **11.5 LPA**
- After Training each student is tested and then awarded Monster India Member COC
  - COC -> Certificate Of Completion

Students completing Java and Database Track from SCTPL would get 100% placement calls

## Java SE 8 Programmer I and II Syballus( Paper codes : 1z0-808 & 1z0-809)

- Watch a directory for changes with the WatchService interface

### Lambda Built-in Functional Interfaces

- Use the built-in interfaces included in the java.util.function package such as Predicate, Consumer, Function, and Supplier
- Develop code that uses primitive versions of functional interfaces
- Develop code that uses binary versions of functional interfaces
- Develop code that uses the UnaryOperator interface

# Java SE 8 Programmer I and II Syballus( Paper codes : 1z0-808 & 1z0-809)

## Building Database Applications with JDBC

- Describe the interfaces that make up the core of the JDBC API (including the Driver, Connection, Statement, and ResultSet interfaces and their relationship to provider implementations)
- Identify the components required to connect to a database using the DriverManager class (including the jdbc URL)
- Submit queries and read results from the database (including creating statements, returning result sets, iterating through the results, and properly closing result sets, statements, and connections)
- Use JDBC transactions (including disabling auto-commit mode, committing and rolling back transactions, and setting and rolling back to savepoints)
- Construct and use RowSet objects using the RowSetProvider class and the RowSetFactory interface
- Create and use PreparedStatement and CallableStatement objects

## Threads

- Create and use the Thread class and the Runnable interface
- Manage and control thread lifecycle
- Synchronize thread access to shared data
- Identify code that may not execute correctly in a multi-threaded environment.

**For any technical Queries  
Contact Rocky Sir @ 98925 44177**

## Concurrency

- Use collections from the java.util.concurrent package with a focus on the advantages over and differences from the traditional java.util collections.
- Use Lock, ReadWriteLock, and ReentrantLock classes in the java.util.concurrent.locks package to support lock-free thread-safe programming on single variables.
- Use Executor, ExecutorService, Executors, Callable, and Future to execute tasks using thread pools.
- Use the parallel Fork/Join Framework

## Localization

- Read and set the locale by using the Locale object
- Build a resource bundle for each locale
- Call a resource bundle from an application
- Format dates, numbers, and currency values for localization with the NumberFormat and DateFormat classes (including number format patterns)
- Describe the advantages of localizing an application
- Define a locale using language and country codes

**See Batch schedules from  
<http://ocjip.suven.net>**

## Course Flow of OCJA 8.0 + OCJP 8.0 Certification at SCTPL



**#COC -> Certificate of Completion, is Issued to each clearing the Oracle Online Test.**

Students completing Java and Database Track from SCTPL would get 100% placement calls