1Z0-803: Java SE 7 Programmer I

Exam Description

The *OCA Java SE 7 Programmer* certification is designed for individuals who possess a strong foundation in the Java Programming language. This certification cover the fundamentals of Java SE 7 programming, such as the significance of object-oriented programming and the steps to create simple Java technology programs.

The *Oracle Certified Associate Java SE 7 Programmer* requires only a single exam to become certified, and is required prior to achieving the designation of *Oracle Certified Professional Java SE 7 Programmer*, which requires one additional exam. Oracle Certification differentiates candidates in the marketplace by providing a competitive edge through proven expertise.

Exam Details

- Exam Number:	1Z0-803
- Associated Certification:	Oracle Certified Associate Java SE 7 Programmer
- Exam Product Version:	Java SE 7
- Time Limit:	120 minutes
- Number of Questions:	70
- Passing Score:	63%

Exam Objectives

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 variable
- Differentiate between object reference variables and primitive variables
- Read or write to object fields
- Explain an object's lifecycle
- Call methods on objects
- Manipulate data using the StringBuilder class and its methods
- Create and manipulate strings

Using Operators and Decision Constructs

- Use Java operators
- Use parentheses 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
- 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, runtime exceptions 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