

Cracking OCPJP 7 Exam

S G Ganesh

Tushar Sharma

WHY GET CERTIFIED?



DIFFERENTIATE YOURSELF

The key to get a job, hike or promotion is to show you deserve it

Certification is a means to show that you've relevant knowledge and skills







show you've some document proof that you have relevant skills or knowledge



show that you are different from others & have some specialized skills/knowledge



preparing and passing the exam gives you focus on mastering the topic



gives you confidence for getting a job or asking for a promotion/raise



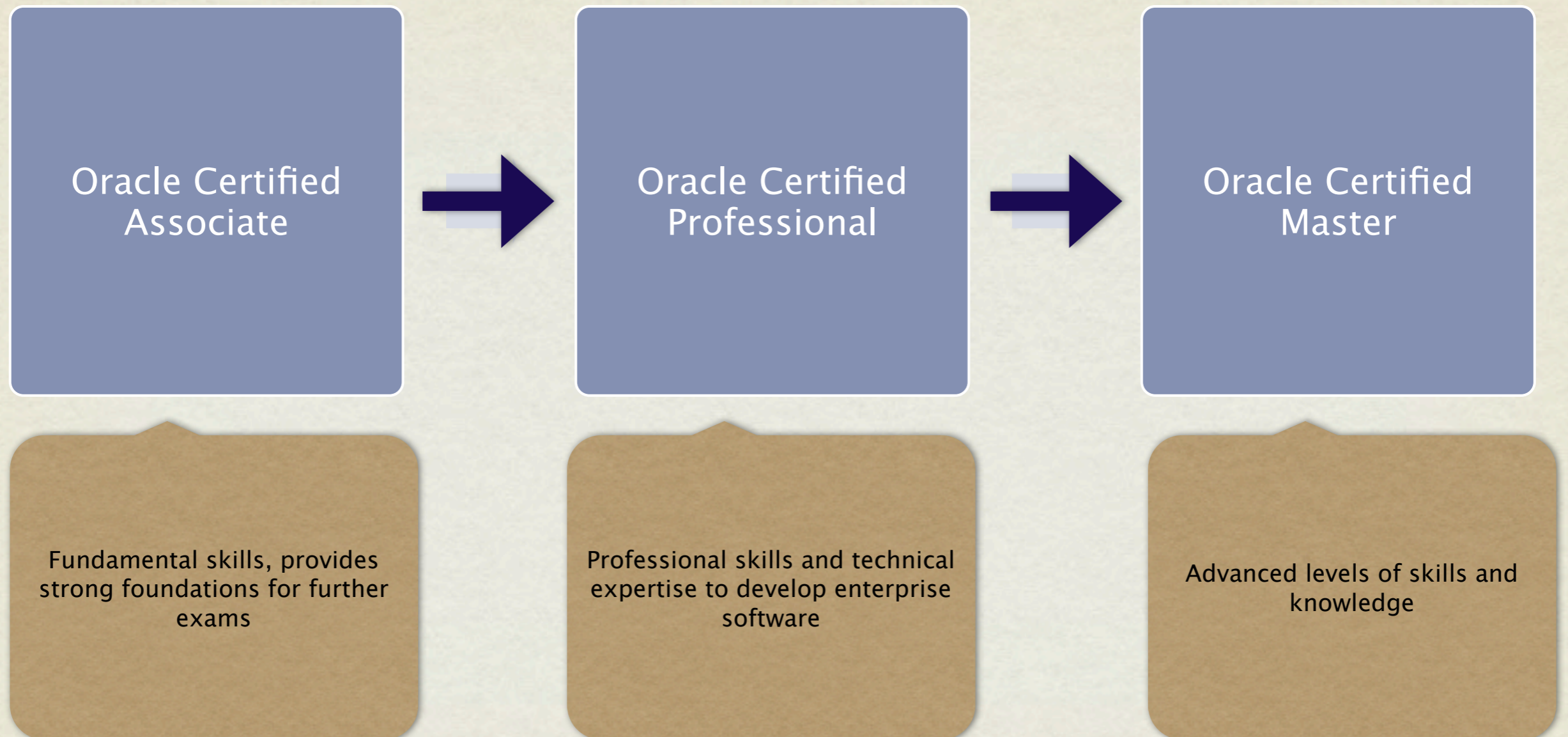
WHY JAVA CERTIFICATION?

Java continues to be popular and is one of the hot skills that is in demand in the job market

Position Mar 2013	Position Mar 2012	Delta in Position	Programming Language	Ratings Mar 2013	Delta Mar 2012	Status
1	1	=	Java	18.156%	+1.05%	A
2	2	=	C	17.141%	+0.05%	A
3	5	↑↑	Objective-C	10.230%	+2.49%	A
4	4	=	C++	9.115%	+1.07%	A
5	3	↓↓	C#	6.597%	-1.65%	A

From www.tiobe.com as on 17 March - Java is the most popular language in the world!

ORACLE'S CERTIFICATION PATH



COMPARISON OF ORACLE'S JAVA EXAMS

Exam Number	1Z0-803	1Z0-804	1Z0-805
Expertise Level	Beginner	Intermediate	Intermediate
Exam Name	Java SE 7 Programmer I	Java SE 7 Programmer II	Upgrade to Java SE 7 Programmer
Associated Certification (abbreviation)	Oracle Certified Associate, Java SE 7 Programmer (OCAJP 7)	Oracle Certified Professional, Java SE 7 Programmer (OCPJP 7)	Oracle Certified Professional, Java SE 7 Programmer (OCPJP 7)
Prerequisite Certification	None	OCAJP 7	Any older OCPJP version or any version of SCJP
Exam Duration	2 hrs 30 minutes (150 mins)	2 hrs 30 minutes (150 mins)	3 hrs (180 mins)
Number of Questions	90 Questions	90 Questions	90 Questions
Pass Percentage	75%	65%	60%
Cost	~ USD 300	~ USD 300	~ USD 300

OCPJP 6 VS. OCPJP 7

Exam Number	1Z0-851	1Z0-804
Expertise Level	Beginner to intermediate	Intermediate
Pre-requisite Certification	None	OCAJP7
Exam Name	Java SE 6 Programmer	Java SE 7 Programmer II
Associated Certification	Oracle Certified Professional, Java SE 6 Programmer (OCPJP 6)	Oracle Certified Professional, Java SE 7 Programmer (OCPJP 7)
Exam Duration	2 hrs 30 minutes (150 mins)	2 hrs 30 minutes (150 mins)
Number of Questions	60 Questions	90 Questions
Pass Percentage	61%	65%
Cost	~ USD 300	~ USD 300

ORACLE
CERTIFIED
PROFESSIONAL
JAVA
PROGRAMMER 7
(OCPJP 7)



EXAM TOPICS

Java Class Design

Advanced Class Design

Object-Oriented Design Principles

Generics and Collections

String Processing

Exceptions and Assertions

Java I/O Fundamentals

Java File I/O (NIO.2)

Building Database Applications with JDBC

Threads

Concurrency

Localization

ALREADY HAVE A JAVA CERTIFICATION?

GO FOR UPGRADE EXAM

Language Enhancements

Design Patterns

Java File I/O (NIO.2)

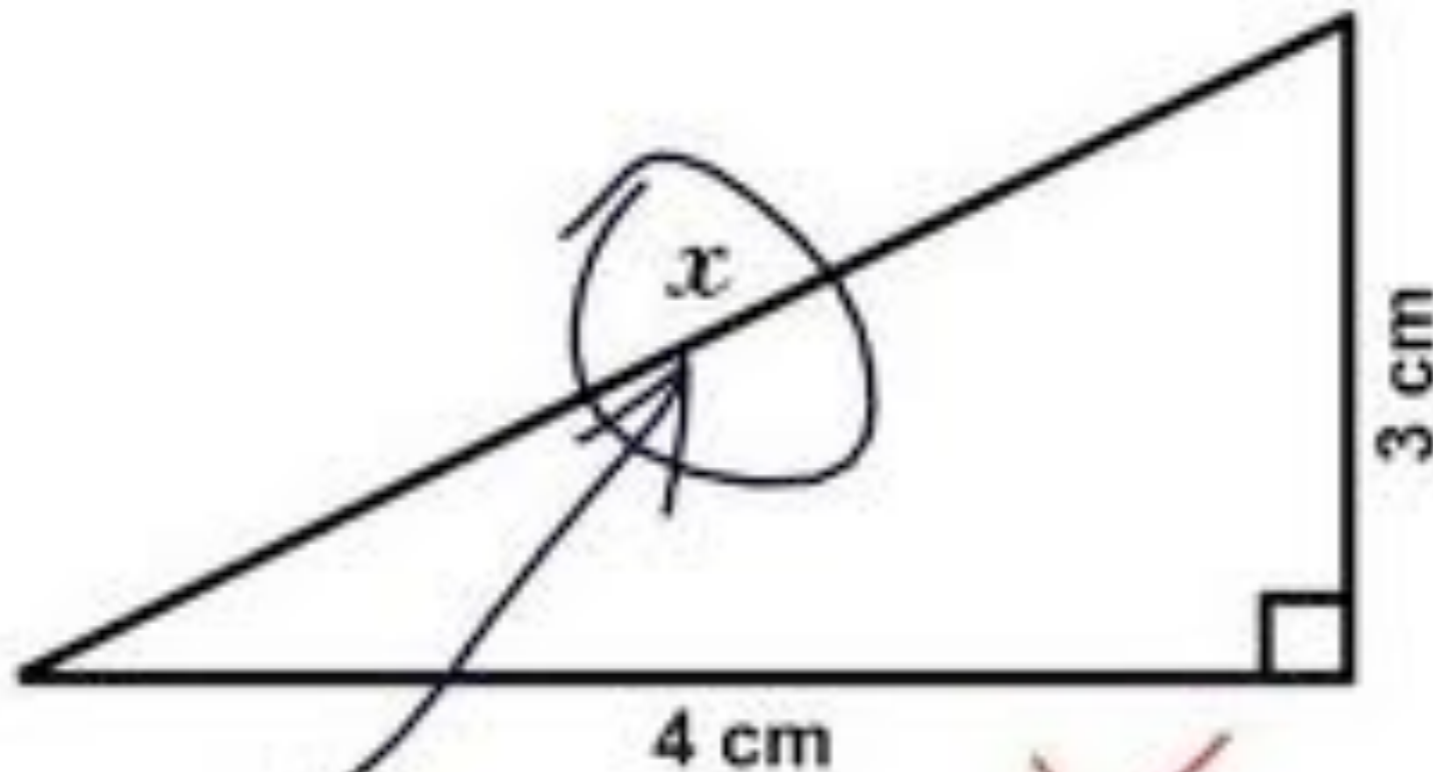
Building Database Applications with JDBC

Concurrency

Localization

GETTING FAMILIAR WITH OCPJP 7 EXAM

3. Find x .



Here it is



WHAT KIND OF EXAM?

- ▶ It's a multiple-choice questions exam
 - ▶ The number of options would be based on the questions
 - ▶ Can be from 4 to 7 options (typically four options)
 - ▶
- ▶ Many questions will have more than one answer to be selected!
 - ▶ The question will clearly tell you how many options you need to select



WHAT DO THE QUESTIONS TEST?

- ▶ Questions intend to test your ability to solve real-world problems
 - ▶ Most questions would be programming questions
 - ▶ Given a program or code segment, predict the behavior
 - ▶ Also few conceptual questions
 - ▶ These questions will test your knowledge and will not have any programs in it. Examples:
 - What are different kinds of drivers in JDBC?
 - What are different kinds of liveness problems with threads?



SAMPLE QUESTION - I

Which *two* of the following statements are true regarding sleep() method in Thread class?

- a) The sleep() method takes milliseconds as an argument for the time to sleep.
- b) The sleep() method takes microseconds as an argument for the time to sleep.
- c) The sleep() method relinquishes the lock when the thread goes to sleep and reacquires the lock when the thread wakes up.
- d) The sleep() method can throw InterruptedException if it is interrupted by another thread when it sleeps.

ANSWER AND EXPLANATION

Options a) and d) are true:

a) Takes milliseconds as the argument for time to sleep.

d) Can throw the InterruptedException if it is interrupted by another thread when it sleeps.

These two options are wrong:

In option b), the sleep() method takes milliseconds as an argument, not microseconds.

In option d), the sleep() method does not relinquish the lock when it goes to sleep; it holds the lock.

RIGHT!



WHAT DO THE QUESTIONS TEST?

- ▶ Questions will check your knowledge of language features and their usage
 - ▶ Will test if you understand language features and can apply them in practical situations
 - ▶ Most questions will be on nitty-gritty details or corner cases, or unusual aspects of the language
 - ▶ Example: You don't just need to understand the generics feature in Java but also need to understand problems due to type-erasure



SAMPLE QUESTION - II

```
class EHBehavior {  
    public static void main(String []args) {  
        try {  
            int i = 10/0; // LINE A  
            System.out.print("after throw -> ");  
        } catch(ArithmeticException ae) {  
            System.out.print("in catch -> ");  
            return;  
        } finally {  
            System.out.print("in finally -> ");  
        }  
        System.out.print("after everything");  
    }  
}
```

Which one of the following options best describes the behavior of this program?

- a) The program prints: in catch -> in finally -> after everything
- b) The program prints: after throw -> in catch -> in finally -> after everything
- c) The program prints: in catch -> in finally -> after everything
- d) The program prints: in catch -> after everything
- e) The program prints: in catch -> in finally ->
- f) When compiled, the program results in a compiler error in line marked with comment in LINE A for divide-by-zero

ANSWER AND EXPLANATION

- ▶ e) The program prints: in catch -> in finally ->
- ▶ The statement `println("after throw -> ");` will never be executed since the line marked with comment LINE A throws an exception. The catch handles `ArithmeticException`, so `println("in catch -> ");` will be executed. Following that there is a return statement, so the function returns. But before the function returns, the finally statement should be called, and hence the statement `println("in finally -> ");` will get executed. So, the statement `println("after everything");` will never get executed.



WHAT DO THE QUESTIONS TEST?

- ▶ Questions will test your knowledge of library features and their usage
 - ▶ Will test if your familiarity with Java APIs and know how to use them in practical situations
 - ▶ Most questions will be on nitty-gritty details or corner cases, or unusual aspects of the library
 - ▶ Example: What does the `remove()` method of `Deque` do? (Answer: It removes the **first** element from the underlying deque instance)



SAMPLE QUESTION - III

```
import java.util.Arrays;

public class DefaultSorter {
    public static void main(String[] args) {
        String[] brics = {"Brazil", "Russia", "India", "China"};
        Arrays.sort(brics, null);    // LINE A
        for (String country : brics) {
            System.out.print(country + " ");
        }
    }
}
```

Which one of the following options correctly describes the behavior of this program?

- a) This program will result in a compiler error in line marked with comment LINE A
- b) When executed, the program prints: Brazil Russia India China
- c) When executed, the program prints: Brazil China India Russia
- d) When executed, the program prints: Russia India China Brazil
- e) When executed, the program throws a runtime exception `NullPointerException` when executing the line marked with comment LINE A
- f) When executed, the program throws a runtime exception `InvalidComparatorException` when executing the line marked with comment LINE A

ANSWER AND EXPLANATION

- ▶ c) When executed, the program prints:
Brazil China India Russia
- ▶ When null is passed as second argument to Arrays.sort() method, it means that the default Comparable (i.e., natural ordering for the elements) should be used. The default Comparator results in sorting the elements in ascending order. The program does not result in a compiler error or any exceptions such as NullPointerException.



SAMPLE QUESTION - IV

Given these two definitions

```
interface I1 {}
```

```
interface I2 {}
```

which one of the following will compile without errors?

- a) `interface I1 implements I1, I2 {}`
- b) `interface I1 implements I1 implements I2 {}`
- c) `interface I1 implements I1 extends I2 {}`
- d) `interface I1 extends I1, I2 {}` marked with comment in LINE A for divide-by-zero

ANSWER AND EXPLANATION

- ▶ d) interface I2 extends I1, I2 {}
- ▶ It is possible for an interface to extend one or more interfaces. In that case, we need to use the extends keyword and separate the list of super-interfaces using commas.



WHAT THE QUESTIONS DO *NOT* TEST?

- ▶ The exam tests your understanding of the Java language and library and your ability to apply it for problem solving
 - ▶ It does **not** test your memory skills
 - ▶ However, there are few topics where you may need to remember key things; examples:
 - ▶ Letters used for creating custom date and time formats ("string patterns") for use with SimpleDateFormat class
 - ▶ Characters used for forming pattern strings in regular expressions
 - ▶ Format specifiers and their meaning for use in format() method in String and in printf()

OUT-OF-SYLLABUS QUESTIONS?!!

- ▶ Exam questions need not be exactly from the exam objectives
 - ▶ Any topics **related** to the exam objectives can come in the exam
 - ▶ For example, serialization and use of transient keyword is not explicitly mentioned in the OCPJP exam topic
 - ▶ But this topic can come in the actual exam because it is related to reading and writing streams one of the streams is ObjectStreams and it relates to serialization!

PREPARING FOR THE EXAM



CODE, CODE, CODE!

- The best way to prepare for the exam is to write lots and lots of small programs and learn from your mistakes!
- If possible, take up some small toy projects in the topics you're new or not familiar with.



READ, READ, READ

- Reading and learn more about the language features and the library
 - ▶ Oracle's online Java tutorial: <http://docs.oracle.com/javase/tutorial/>; <http://docs.oracle.com/javase/tutorial/extra/certification/javase-7-programmer2.html>
 - ▶ Java documentation: <http://docs.oracle.com/javase/7/docs/api/>



FOCUS MORE ON NEW TOPICS

- Focus especially on Java 7 features in OCPJP
- Also, take a close look at the exam objectives and grade yourself from say 1 to 10 with 10 being the highest. Prepare all the topics for which you've rated yourself as 8 or below.



PLAN AHEAD TO TAKE THE EXAM

- Plan for taking your exam well in advance
- Look out for scheduling the exam when you'll be free for at least a few weeks for exam preparation; avoid last minute rush to prepare

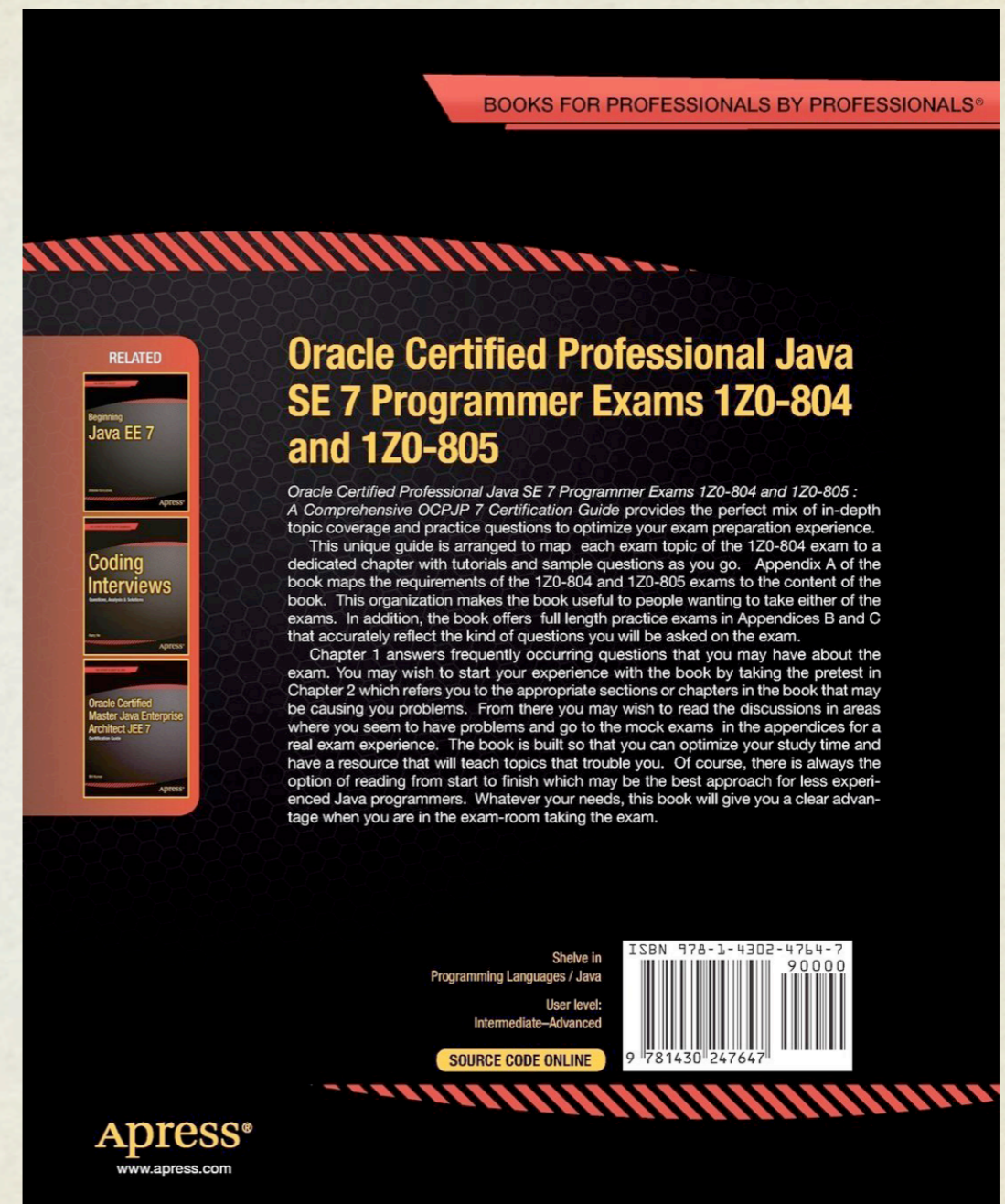
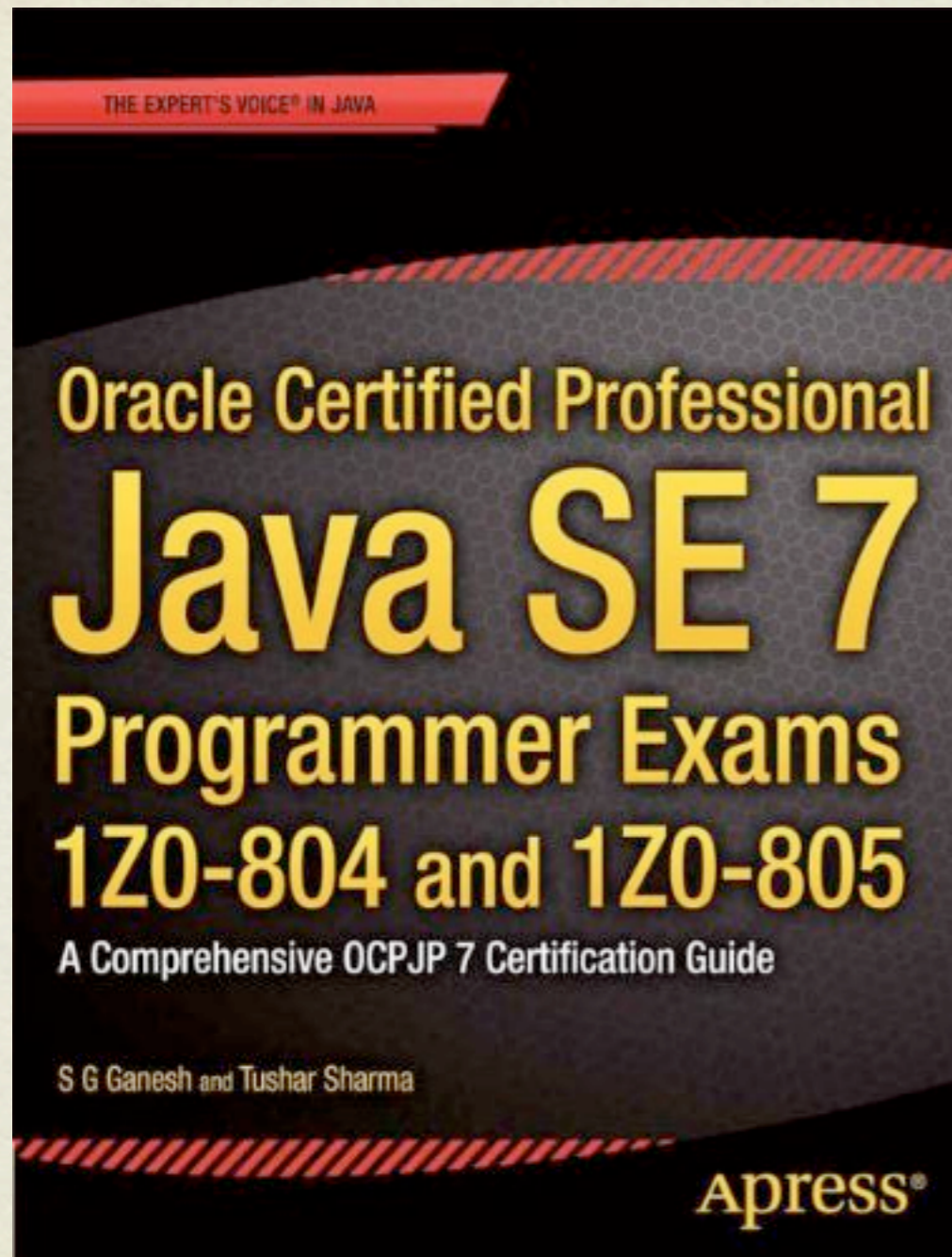


HOW TO REGISTER?

- ▶ Three options:
 - ▶ You can register and pay at the Pearson VUE website
 - ▶ Recommended option
 - ▶ You can buy exam voucher from Oracle and then register yourself in Pearson VUE website
 - ▶ You can register and pay in the Oracle Testing Center (OTC)



OCPJP 7 BOOK



OCPJP 7 BOOK

Title	Oracle Certified Professional Java SE 7 Programmer Exams 1Z0-804 and 1Z0-805
Authors	S G Ganesh and Tushar Sharma
Edition & Publication Date	1 edition (February 27, 2013)
Pages	656
Publisher	Apress
ISBN-13	978-1430247647
List Price	US \$45.99
Amazon URL	http://amzn.com/1430247649
Blog	http://ocpjp7.blogspot.in
Apress URL	http://www.apress.com/9781430247647

ALL THE BEST!

OCPJP7
NIO.2
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Advanced Class Design
Localization
Exceptions
Java
Concurrency Object-Oriented Design Principles
Database Applications
Java Class Design
String Processing
Assertions
Oracle
I/O Fundamentals
Collections Generics Threads