A Refresher ... Learning Java

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"Hello World"! Welcome to Java programming. Java is a fast, secure programming language that can be used for a broad range of electronics. *The principle of Java is "write once, run anywhere", meaning that code does not need to be recompiled when running on a different platform.* Therefore, it was no surprised that in 2012 Java became one of the most used programming languages.

Taking Your First Steps: Beginner Tutorials

There are many online tutorials for learning Java. A selected few have been presented below.

- First, to acquaint yourself with Java, you can download Dr Java. It is a light-weight program that simulates the real program and is easier to manoeuvre. Here is the download link that has both Mac and PC versions.<u>http://www.drjava.org/</u>.
- When you are more confident with Java, you can download the official program for free from the official website.<u>http://www.java.com/en/</u>
- If you learn better from a book, "Sams Teach Yourself Java 2 in 24 Hours" e-book is one of the best sources.
 - <u>http://www.informit.com/library/li</u> <u>brary.aspx?b=STY_Java2_24hours</u>.
 - This book is an improved version of the last and has detailed step-by-step instruction. It assumes no prior contact with any programming language and since it is an e-book, you can



just copy and paste the example code into your Java program.

- If you learn better with a more interactive platform, then <u>http://www.learnjavaonline.org/</u> can help you. This website has the basic tutorial with an interactive input window at the bottom of the page. The lessons will guide you through the fundamentals of Java such as class, integers, strings, etc.
- Looking for a tutorial type of learning system? There are gurus on YouTube that can help you. Here is a link to a playlist of lessons that starts with the basics.
 - http://www.youtube.com/watch?v=3MZIkY55fS0&list=PL8C951C2EBA637821.

- If you are looking for more exercises to hone your skills, then look into this link. <u>http://www.roseindia.net/java/beginners/</u>. It has many exercise, but not in any particular difficulty order.
- Often you will encounter problems when you run your code. Do not worry because when you debug your code, Java will give helpful hints for why the code would not run. If you have trouble understanding the technical terms in the help box, you can find definitions to the term on this website.
 - http://www.java.com/en/download/faq/helpful concepts.xml
- There are online communities that can help with learning. For example, on P2PU, simply sign up and you can start learning with other like-minded individuals. <u>https://p2pu.org/en/</u>
- And finally, when you really can't solve a problem, ask for help! <u>http://stackoverflow.com/questions/tagged/java</u>.
 - \circ $\,$ On this site, you can post your questions if it has not been asked before.

Java Refresher for the Seasoned Programmer

- To start, here is a link to download Eclipse, a widely used Java IDE.
 - o <u>http://www.eclipse.org/downloads/</u>
- If you know how to program in C++, feel free to start with the link below.
 - <u>http://www.ugrad.cs.ubc.ca/~cs219/CourseNotes/Java/intro.html</u>
 - This link explains the difference between the two languages and teaches accordingly. The various lectures and assignments each have clear divisions, allowing you to easily find the relevant lesson.
- "Learning Java" by Pat Niemeyer is a systematic overview of the Java program. This book is written especially for users who program with other languages or were previously familiar with Java. The book has a clear index that can be used to navigate
 - <u>http://aiti.mit.edu/media/programs/indonesi</u> <u>a-summer-2013/materials/o'reilly -</u> <u>learning_java.pdf</u>
- YouTube videos are also helpful. The tutorials are divided into lessons with specific information in each.



The videos are about 10-15 minutes long with audio guides for step-to-step instructions. <u>http://www.youtube.com/watch?v=3MZIkY55fS0&list=PL8C951C2EBA637821</u>

GOOD LUCK!