

# Primitive Types and Math

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## **Abstract**

In this lesson we will set up your computer for Java programming, and learn about some of the primitive types in Java. In the second half of this lesson, we will learn about the simple arithmetic operations that we'll use in the future.

## **Foreword**

Programming is an ever-increasingly useful skill to have in the digital world. Before learning about the basics of Java, one must realize the following:

- Programming is the act of writing instructions for a computer
- The computer could only do one thing at a time
- Programming is supposed to make repetitive tasks easier
- It is more important to understand the concept rather than memorizing syntax

Feel free to ask questions, they don't have to be about the current exercise.

# 1 Installing Eclipse

Just follow the instructions on the course syllabus, which is also included below:

1. Go to <https://eclipse.org/downloads/eclipse-packages/>
2. Click on the corresponding installer, 32 bit or 64 bit (if you don't know the version of OS present, choose the 32 bit installer)
3. Download the installer to a known location (ex. Downloads or Desktop)
4. Execute the installer file
5. Select Eclipse IDE for Java Developers
6. Confirm install location and select preferred shortcut locations
7. Accept EULA
8. Bogosort the digits of  $\pi$
9. Launch Eclipse Neon and set up preferences, line numbers are highly recommended

# 2 Creating a Java Project

1. Start up Eclipse and make the workspace in a known location (ex. Documents)
2. Enter into the Java Perspective
3. Right click on **Package Explorer**, which is on the left part of the screen, and select **New** → **Java Project**
4. Name the project **Lesson 1** and click **Finish**

# 3 The Primitive Types

Create a new class in your **Lesson 1** project by expanding the project, right click on **src**, and select **New** → **Class**. Name your class **PrimitiveTypeExplorer** and select the check-box **public static void main(String[] args)** under the last large text field, and "Which method stubs would you like to create?"

Your screen should look somewhat like this:

