



Introduction

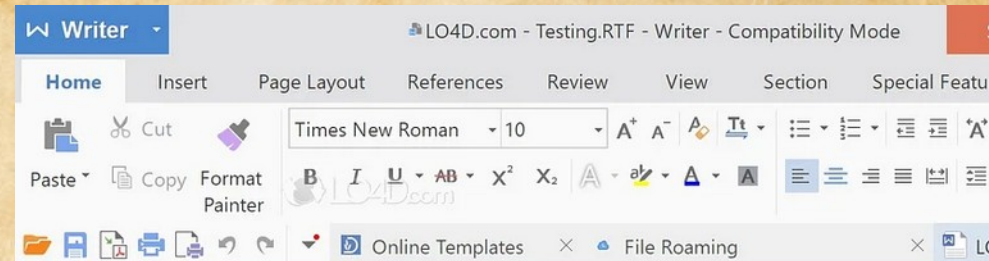
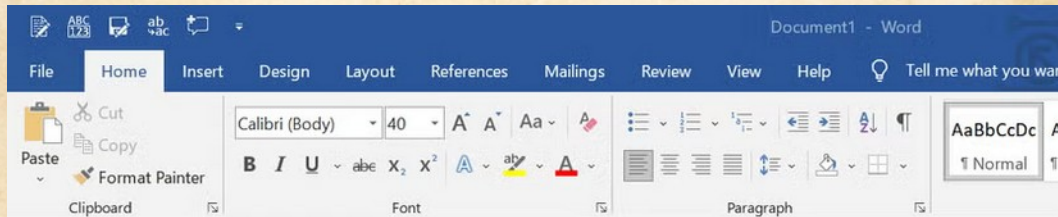
*Integrated Development Environment (IDE):
Eclipse*

Lecture Contents

- What is an IDE?
- Installing Eclipse

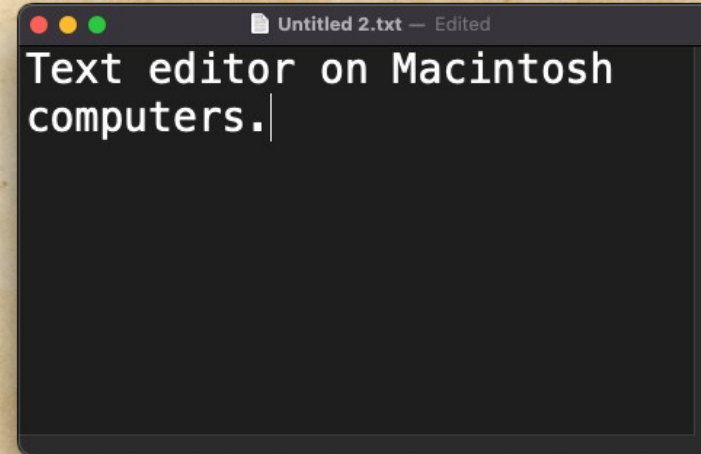
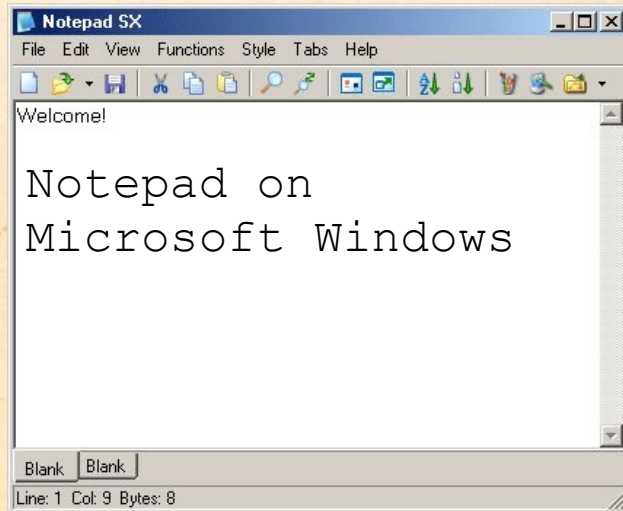
What is an IDE?

- I expect you know what a **word processor** is...
 - Maybe you've used **Microsoft Word** or **WPS Writer**?
 - Word processors are used for making things look good to publish for human consumption.



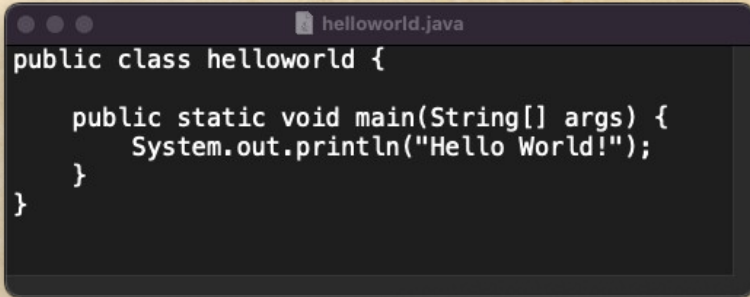
What is an IDE?

- Word processors are used for making things look good to publish for human consumption.
- For coding, we just need *plain text*. We can use a *text editor*, such as...



What is an IDE?

- If you use a *text editor* (and not an IDE), you will need to run your program using different software, often from the ***command line***

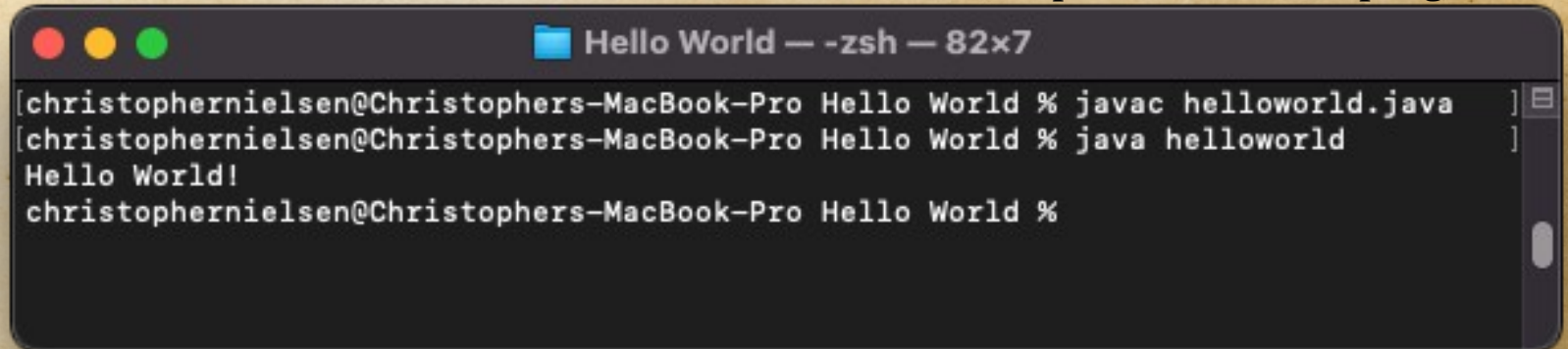


```
public class helloworld {  
    public static void main(String[] args) {  
        System.out.println("Hello World!");  
    }  
}
```

Here is our program in a text editor.



Here we are using Oracle's ***Java Development Kit*** (JDK) to compile and run the program.



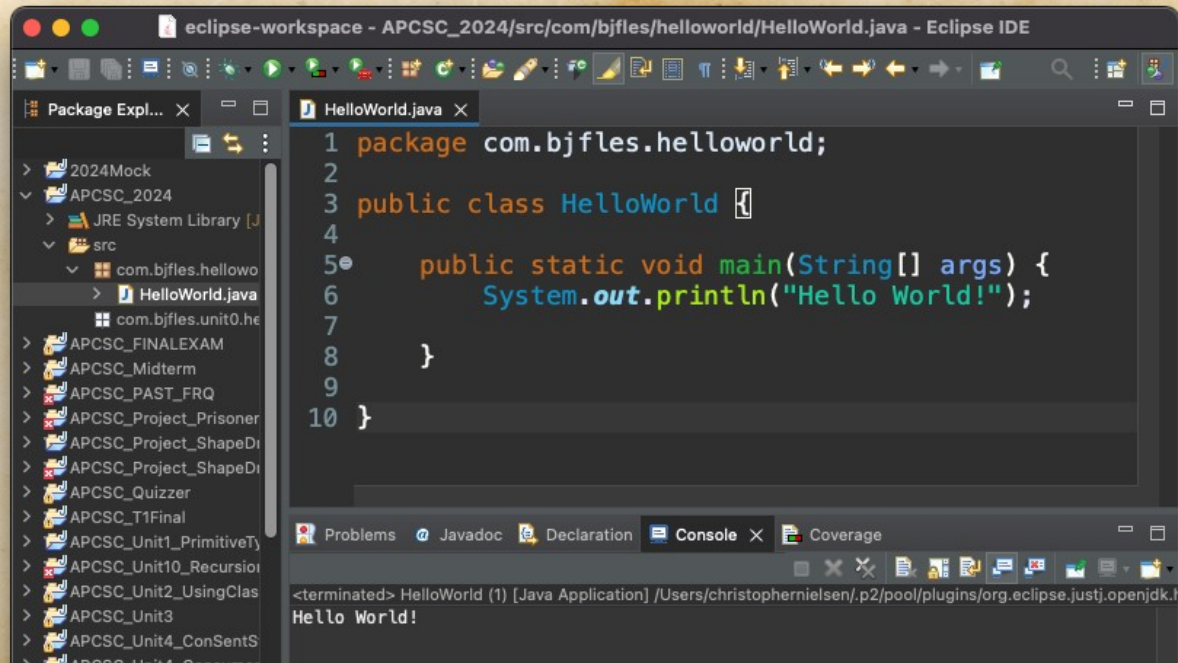
```
Hello World - zsh - 82x7  
[christophernielsen@Christophers-MacBook-Pro Hello World % javac helloworld.java]  
[christophernielsen@Christophers-MacBook-Pro Hello World % java helloworld]  
Hello World!  
christophernielsen@Christophers-MacBook-Pro Hello World %
```

What is an IDE?

- ***Integrated Development Environment (IDE)***
 - Enhances productivity compared to using multiple programs for coding.
 - Includes:
 - A text editor
 - Usually with features such as color coding, auto-indentation, and auto-complete
 - Build tools (compiler, etc.)
 - Debugger
 - An IDE allows you to edit and run your program in one place
 - Examples:
 - Eclipse, VS Code, IntelliJ

Which IDE to choose?

- To start, I recommend students use **Eclipse**
 - Or, alternatively, **Visual Studio Code**
 - If you use another IDE, you will need to solve problems yourself...

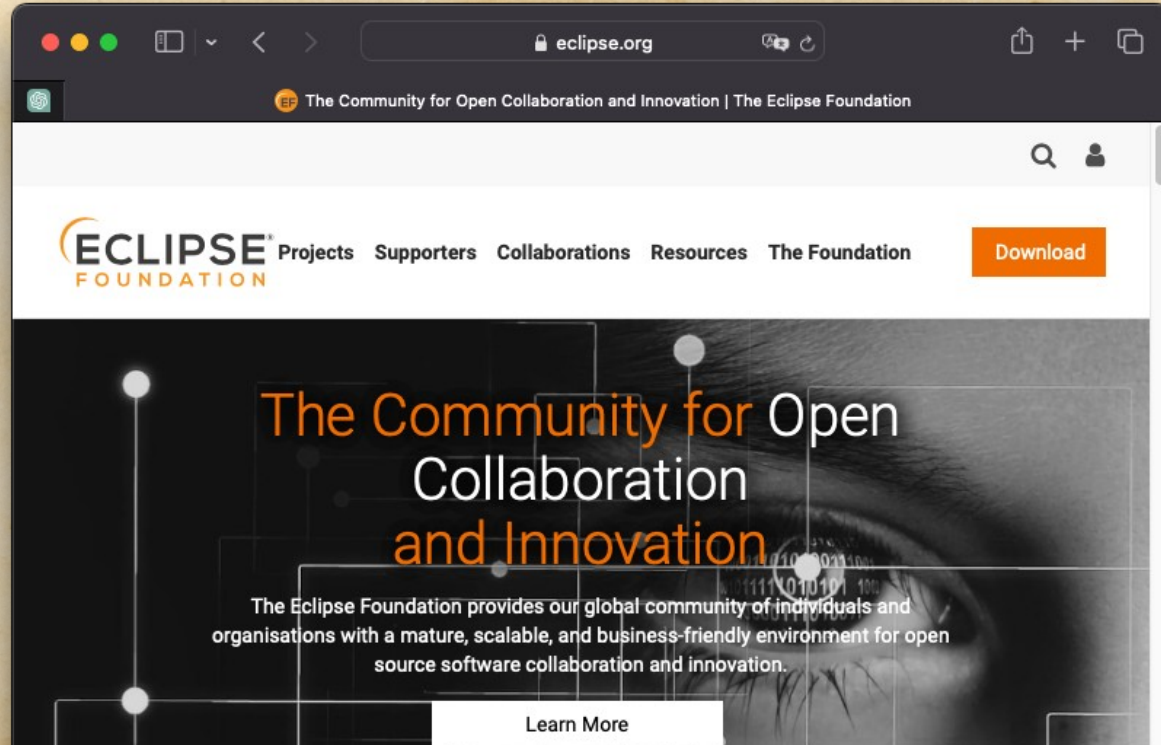


Installing Eclipse

- The next slides have instructions for installing Eclipse.
 - You can follow these if they work.
 - If you have trouble, search for online instructions.
 - **WARNING:** ensure you're downloading from **eclipse.org**, or you might be getting some extra *malware*!!

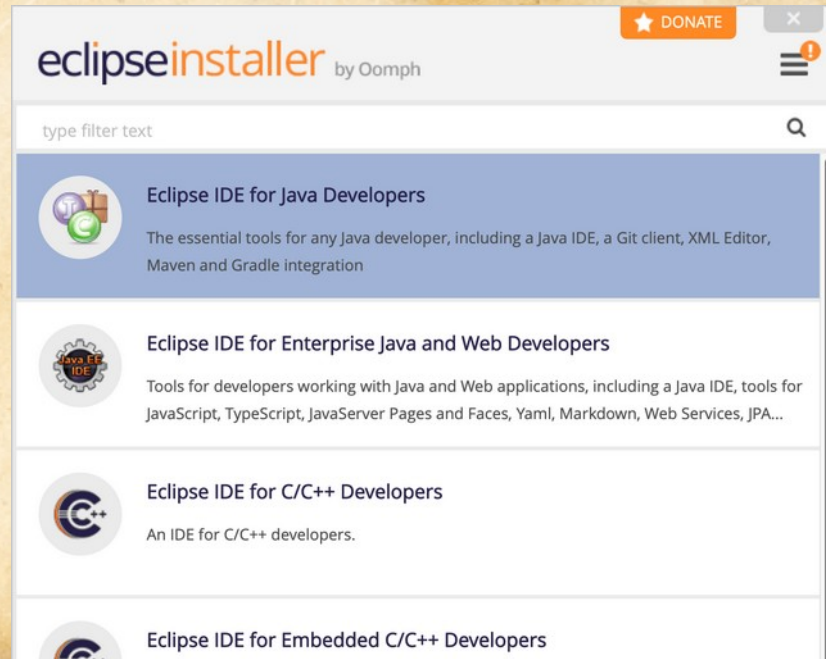
Installing Eclipse

- Download the installer for Eclipse for your operating system from *eclipse.org* ...



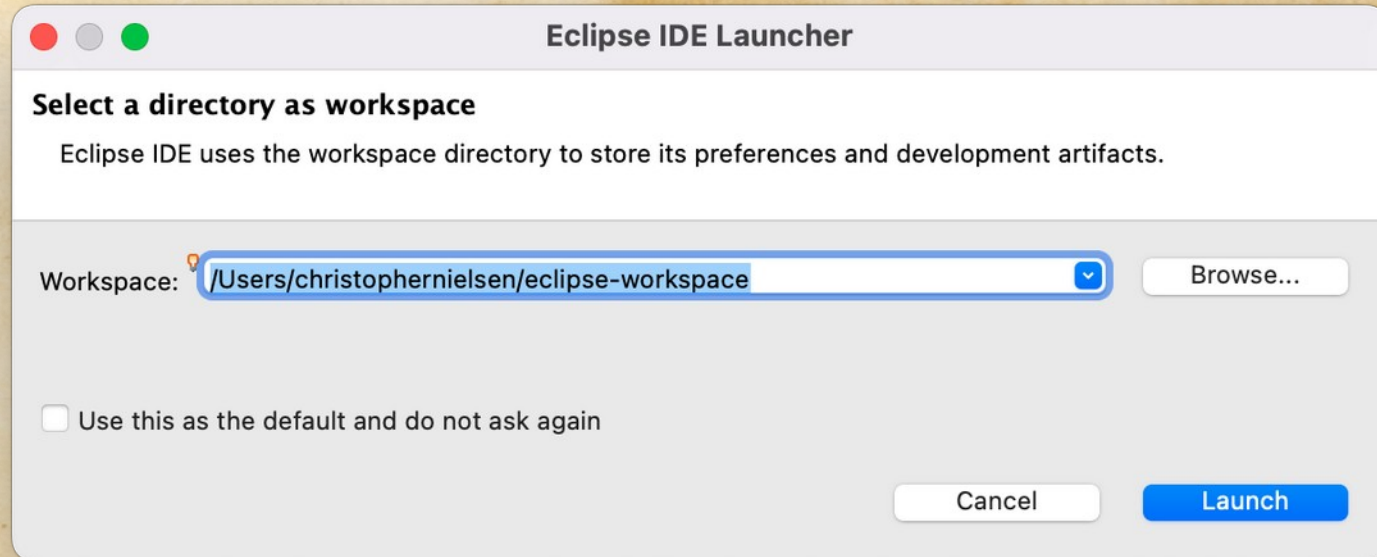
Installing Eclipse

- Run the installer
 - **Important:** choose “**Eclipse IDE for Java Developers**”
 - Follow the instructions to complete installation, then run Eclipse



Installing Eclipse

- When you start Eclipse...
 - the default directory should be fine.
 - **this is where your code will be saved!**



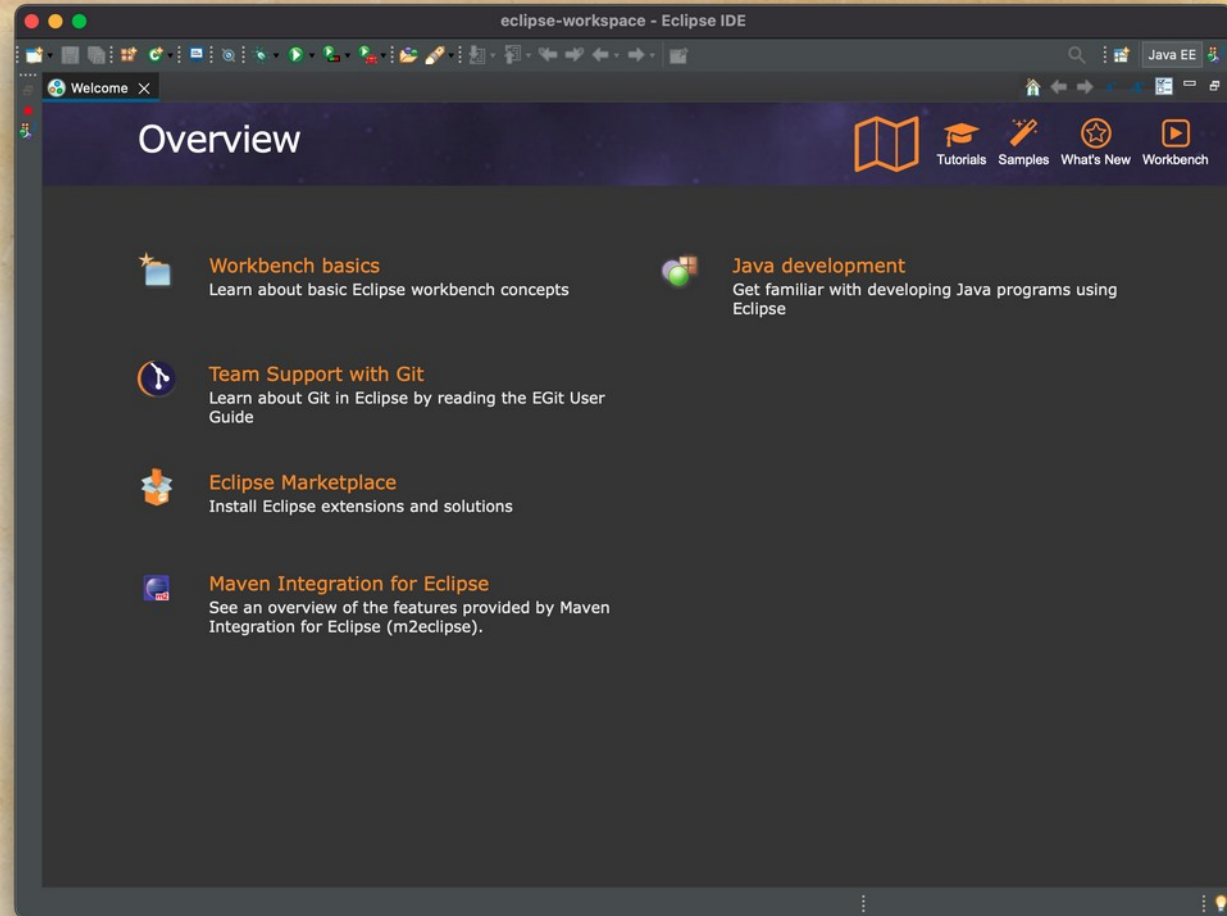
Installing Eclipse

- If you get here, then it seems you have Eclipse installed successfully.



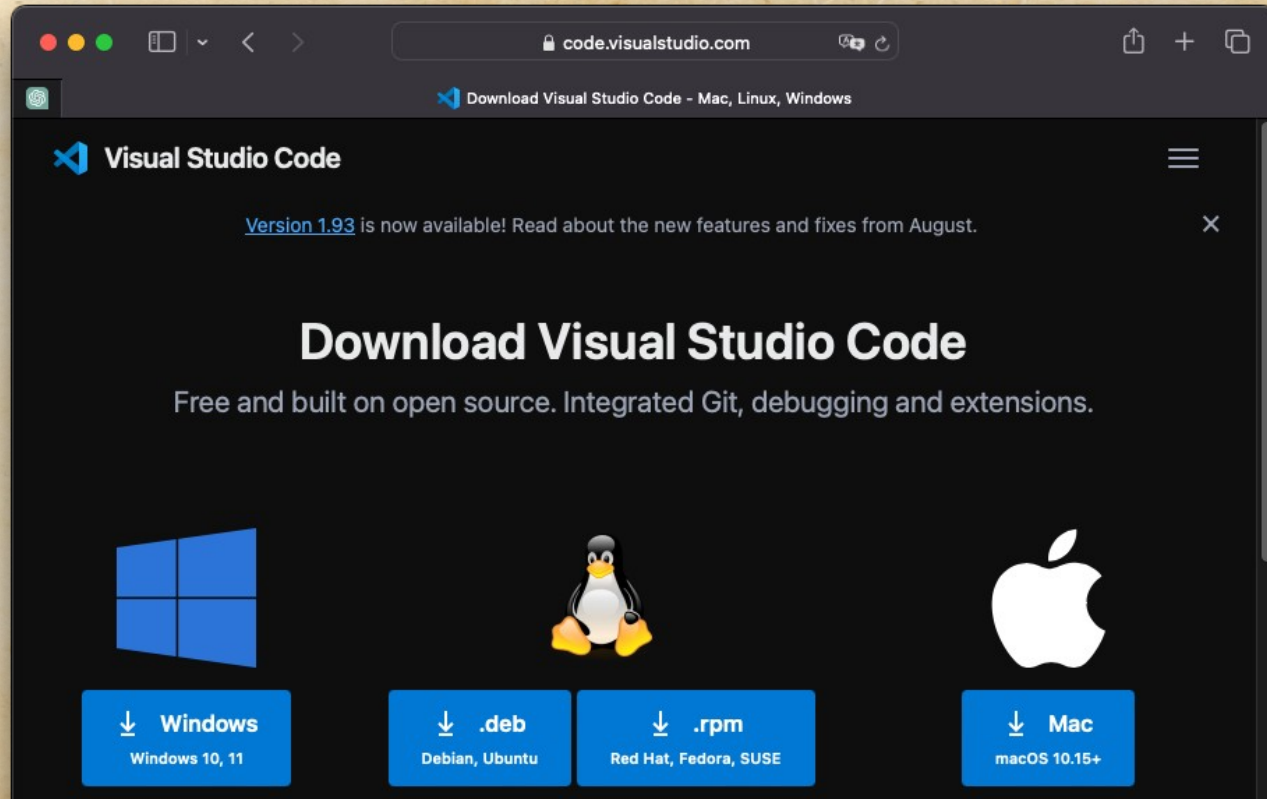
Congratulations!

- Next step is writing your first Java program!



Installing VS Code (An alternative to Eclipse)

- Find instructions online, but be sure you're downloading from:
code.visualstudio.com





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