Introduction To The Java Programming Language

REVIEW FROM LECTURE-WHAT IS JAVA?

- Java is a platform independent programming language
  - Do you know what this means?
- We will say Java is a compiled language. How does the Java compiler work?
- Why does your textbook in section 1.5 say Java is interpreted though?
  - Let's look at a document typed by the textbook author explaining this in detail

Some Key Facts/Advice

Notice this class is not called "Java Programming". It is called "Computer Programming Principles I"

The principles of programming in Python apply to Java. Just not the syntax and semantics.

Code a little every day. Especially if you're struggling.

Attend these Sessions!

Let's look at a simple Java Program- Line by Line

```
package Week1;

/**
 *
 * @author josep
 */
import java.util.Scanner;
public class SimpleJava {
    public static void main(String [] args){
        Scanner keys = new Scanner(System.in);
        System.out.print("Enter a message to be echoed back:");
        String usrMsg = keys.nextLine();
        System.out.println(usrMsg);
    }
```

Here is the output of compiling and running on the command line.

```
C:\Users\josep\OneDrive - Lander University\Tutoring\CIS 230 PASS Session\Java Week 1\CIS230PASS\src\Week1>javac SimpleJava.java

C:\Users\josep\OneDrive - Lander University\Tutoring\CIS 230 PASS Session\Java Week 1\CIS230PASS\src\Week1>dir
 Volume in drive C is Windows
 Volume Serial Number is 2ED0-9CF0

 Directory of C:\Users\josep\OneDrive - Lander University\Tutoring\CIS 230 PASS Session\Java Week 1\CIS230PASS\src\Week1
12/29/2021  12:58 PM    <DIR>          .
12/29/2021  12:57 PM    <DIR>          ..
12/29/2021  12:58 PM               650 SimpleJava.class
12/29/2021  12:54 PM               562 SimpleJava.java
               2 File(s)          1,212 bytes
               2 Dir(s)  374,637,096,960 bytes free

C:\Users\josep\OneDrive - Lander University\Tutoring\CIS 230 PASS Session\Java Week 1\CIS230PASS\src\Week1>java SimpleJava.java
Enter a message to be echoed back:Hello World
Hello World

C:\Users\josep\OneDrive - Lander University\Tutoring\CIS 230 PASS Session\Java Week 1\CIS230PASS\src\Week1>
```

The exact same program in Python

```
usrMsg = input("Enter a message to be echoed back:")
print(usrMsg)
```

The python program run from the command line

```
C:\Users\josep\OneDrive - Lander University\Tutoring\CIS 230 PASS Session\Java Week 1>py SimplePython.py
Enter a message to be echoed back:Hello World
Hello World
```

Notice I did not compile first this time!

NOW WE WILL CODE TOGETHER

DATE

S M T W T F S

- LET'S WRITE A PROGRAM THAT ADDS TWO NUMBERS.

NOW, YOU CODE!

DATE

S M T W T F S

- WITHOUT NOTES WRITE A HELLO WORLD JAVA PROGRAM!
- WITH NOTES WRITE A PROGRAM THAT ADDS THREE NUMBERS AND PRINTS THE SUM.