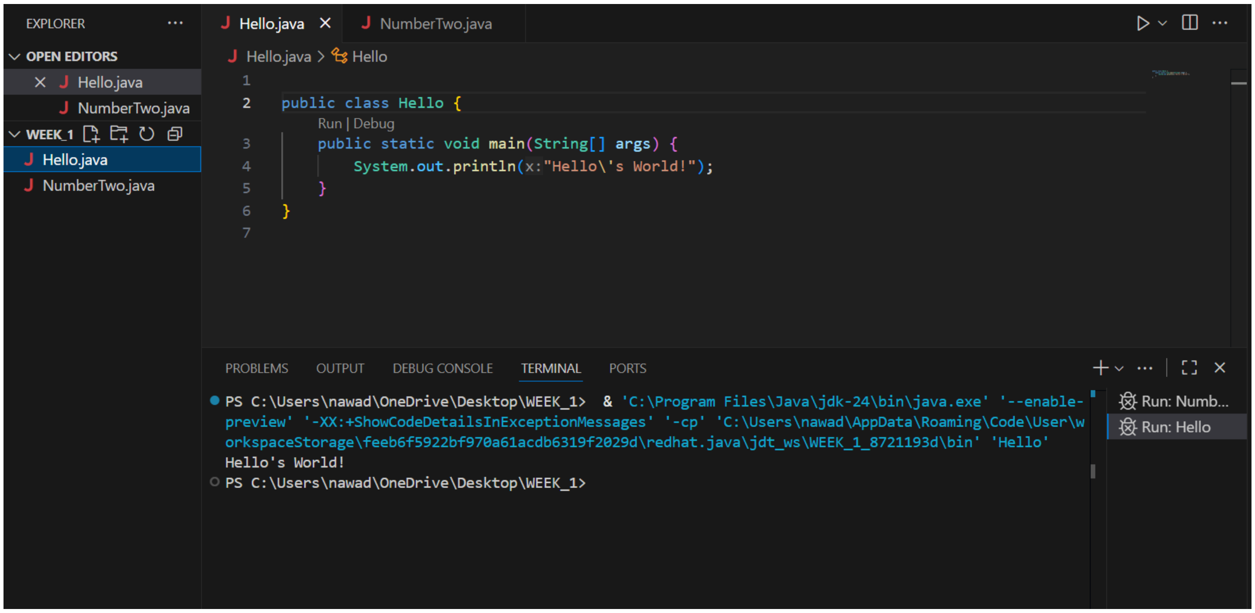
1. Write a program that prints **Hello World!** to the console. Save the program as Hello.java.



```java

public class Hello {
    Run | Debug
    public static void main(String[] args) {
        System.out.println(x:"Hello\'s World!");
    }
}

```

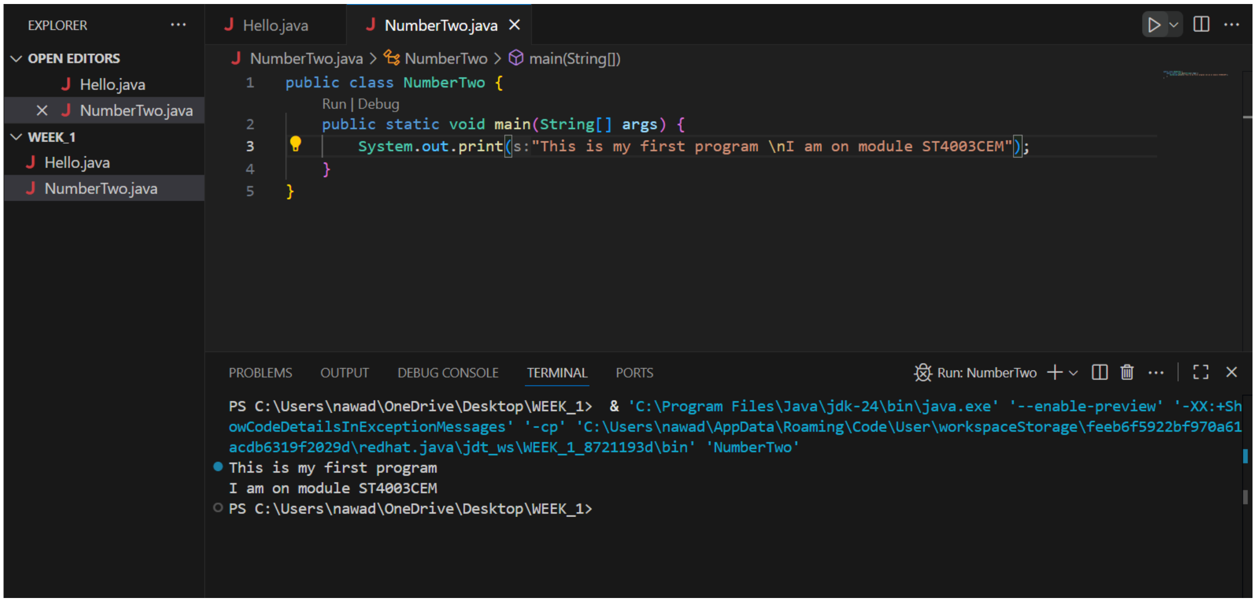
```
PS C:\Users\nawad\OneDrive\Desktop\WEEK_1>  & 'C:\Program Files\Java\jdk-24\bin\java.exe' '--enable-
preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\nawad\AppData\Roaming\Code\User\w
orkspaceStorage\feeb6f5922bf970a61acdb6319f2029d\redhat.java\jdt_ws\WEEK_1_8721193d\bin' 'Hello'
Hello's World!
PS C:\Users\nawad\OneDrive\Desktop\WEEK_1>
```

2. Extend/Modify the above program to print two additional lines:

This is my first program

I am on module ST4003CEM

System.out.print (**not** println) and produces the same output.



```java
public class NumberTwo {
    Run | Debug
    public static void main(String[] args) {
        System.out.print(s:"This is my first program \nI am on module ST4003CEM");
    }
}
```

```
PS C:\Users\nawad\OneDrive\Desktop\WEEK_1>  & 'C:\Program Files\Java\jdk-24\bin\java.exe' '--enable-preview' '-XX:+Sh
owCodeDetailsInExceptionMessages' '-cp' 'C:\Users\nawad\AppData\Roaming\Code\User\workspaceStorage\feeb6f5922bf970a61
acdb6319f2029d\redhat.java\jdt_ws\WEEK_1_8721193d\bin' 'NumberTwo'
This is my first program
I am on module ST4003CEM
PS C:\Users\nawad\OneDrive\Desktop\WEEK_1>
```

3. Write a program that prints the following output:

A "quoted" String is

'much' better if you learn

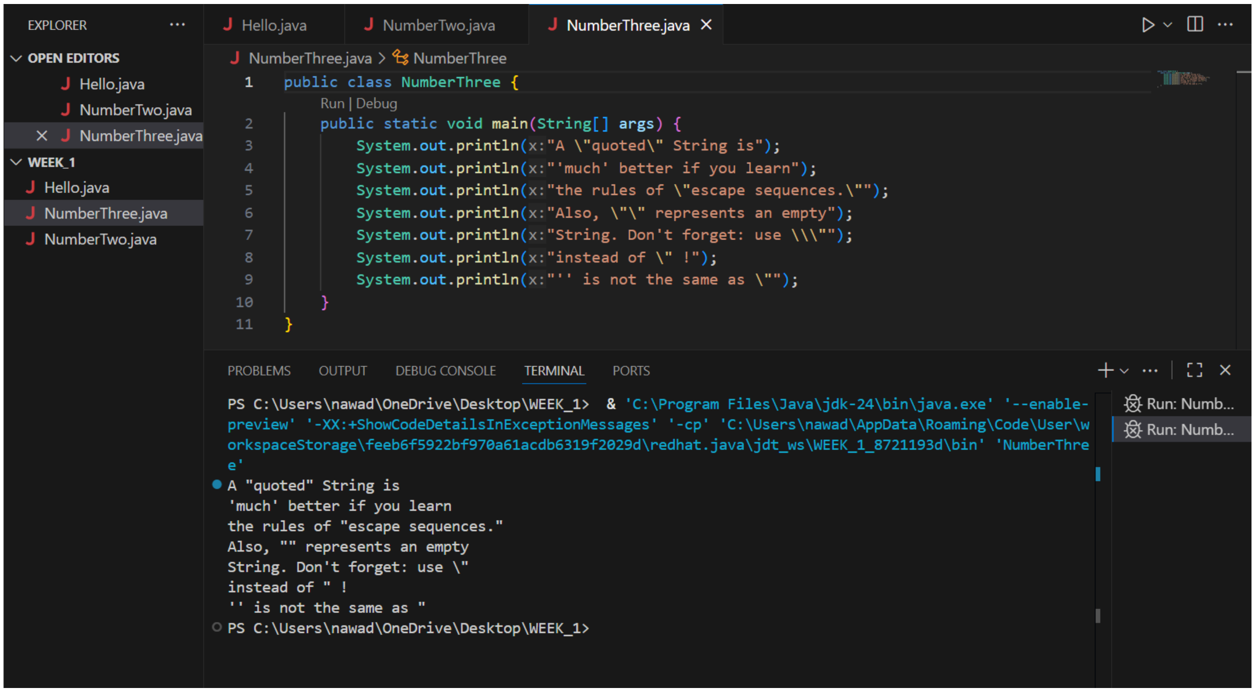
the rules of "escape sequences."

Also, "" represents an empty

String. Don't forget: use \"

instead of " !

" is not the same as "



```java
public class NumberThree {
    public static void main(String[] args) {
        System.out.println(x:"A \"quoted\" String is");
        System.out.println(x:"'much' better if you learn");
        System.out.println(x:"the rules of \"escape sequences.\"");
        System.out.println(x:"Also, \"\" represents an empty");
        System.out.println(x:"String. Don't forget: use \\\"");
        System.out.println(x:"instead of \" !");
        System.out.println(x:"'' is not the same as \"");
    }
}
```

```
PS C:\Users\nawad\OneDrive\Desktop\WEEK_1>  & 'C:\Program Files\Java\jdk-24\bin\java.exe' '--enable-
preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\nawad\AppData\Roaming\Code\User\w
orkspaceStorage\feeb6f5922bf970a61acdb6319f2029d\redhat.java\jdt_ws\WEEK_1_8721193d\bin' 'NumberThre
e'
A "quoted" String is
'much' better if you learn
the rules of "escape sequences."
Also, "" represents an empty
String. Don't forget: use \"
instead of " !
'' is not the same as "
PS C:\Users\nawad\OneDrive\Desktop\WEEK_1>
```

4. WAP that prints the following pattern:

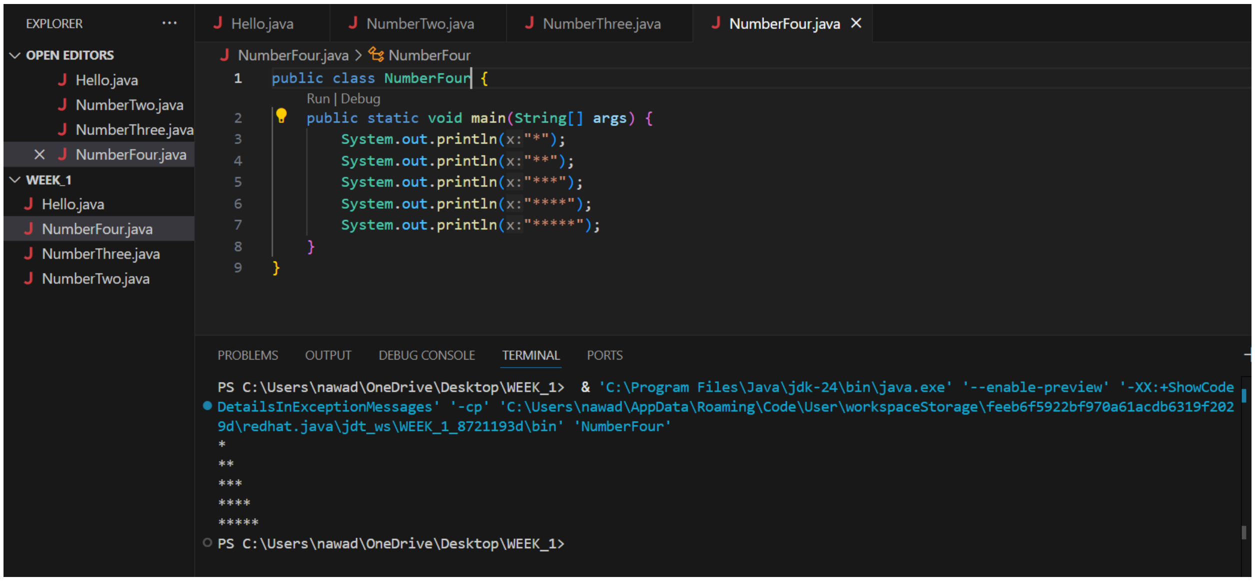
*

**

***

****

*****



```java
public class NumberFour {
    public static void main(String[] args) {
        System.out.println(x:"*");
        System.out.println(x:"**");
        System.out.println(x:"***");
        System.out.println(x:"****");
        System.out.println(x:"*****");
    }
}
```

```
PS C:\Users\nawad\OneDrive\Desktop\WEEK_1>  & 'C:\Program Files\Java\jdk-24\bin\java.exe' '--enable-preview' '-XX:+ShowCode
DetailsInExceptionMessages' '-cp' 'C:\Users\nawad\AppData\Roaming\Code\User\workspaceStorage\feeb6f5922bf970a61acdb6319f202
9d\redhat.java\jdt_ws\WEEK_1_8721193d\bin' 'NumberFour'
*
**
***
****
*****
PS C:\Users\nawad\OneDrive\Desktop\WEEK_1>
```

5. WAP prints the following pattern:

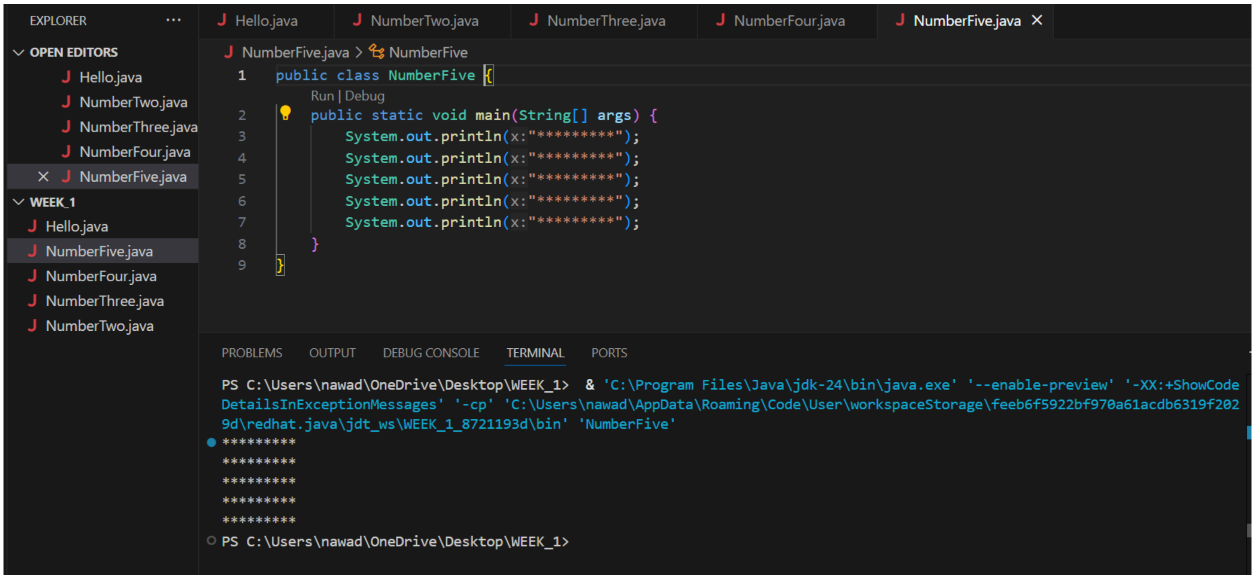
****

****

****

****

****



```java
public class NumberFive {
    public static void main(String[] args) {
        System.out.println(x:"*********");
        System.out.println(x:"*********");
        System.out.println(x:"*********");
        System.out.println(x:"*********");
        System.out.println(x:"*********");
    }
}
```

```
PS C:\Users\nawad\OneDrive\Desktop\WEEK_1>  & 'C:\Program Files\Java\jdk-24\bin\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\nawad\AppData\Roaming\Code\User\workspaceStorage\feeb6f5922bf970a61acdb6319f2029d\redhat.java\jdt_ws\WEEK_1_8721193d\bin' 'NumberFive'
*********
*********
*********
*********
*********
PS C:\Users\nawad\OneDrive\Desktop\WEEK_1>
```

6. WAP that prints the following output:

A well-formed Java program has a main method with { and } braces.

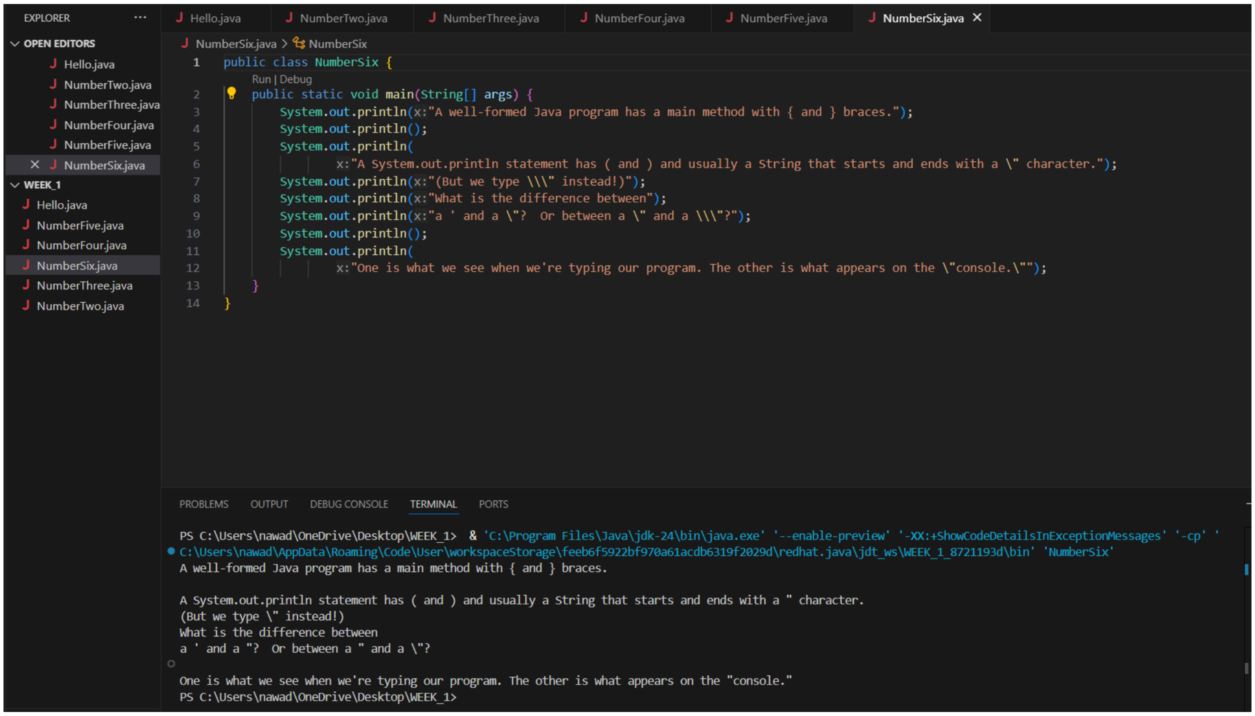
A System.out.println statement has (and) and usually a String that starts and ends with a " character.

(But we type \" instead!)

What is the difference between

a ' and a "? Or between a " and a \"?

One is what we see when we're typing our program. The other is what appears on the "console."



```java
public class NumberSix {
    public static void main(String[] args) {
        System.out.println(x:"A well-formed Java program has a main method with { and } braces.");
        System.out.println();
        System.out.println(
                x:"A System.out.println statement has ( and ) and usually a String that starts and ends with a \" character.");
        System.out.println(x:"(But we type \\\" instead!)");
        System.out.println(x:"What is the difference between");
        System.out.println(x:"a ' and a \"?  Or between a \" and a \\\"?");
        System.out.println();
        System.out.println(
                x:"One is what we see when we're typing our program. The other is what appears on the \"console.\"");
    }
}
```

```
PS C:\Users\nawad\OneDrive\Desktop\WEEK_1>  & 'C:\Program Files\Java\jdk-24\bin\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' '
C:\Users\nawad\AppData\Roaming\Code\User\workspaceStorage\feeb6f5922bf970a61acdb6319f2029d\redhat.java\jdt_ws\WEEK_1_8721193d\bin' 'NumberSix'
A well-formed Java program has a main method with { and } braces.

A System.out.println statement has ( and ) and usually a String that starts and ends with a " character.
(But we type \" instead!)
What is the difference between
a ' and a "?  Or between a " and a \"?

One is what we see when we're typing our program. The other is what appears on the "console."
PS C:\Users\nawad\OneDrive\Desktop\WEEK_1>
```