TASK 1

Prachi Silwal
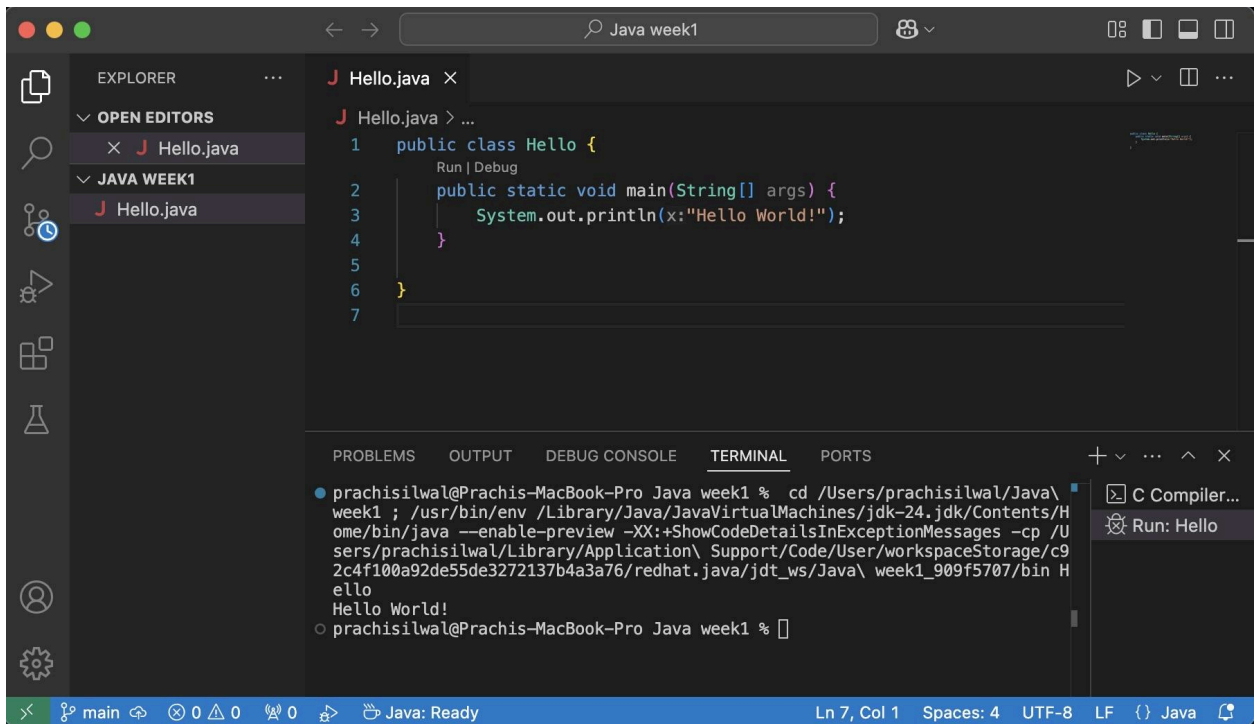
BSc. Hons Computer Science with AI, Softwarica college of IT and E-commerce

ST40003CMD-Programming: Professional Practice

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

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.

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
J EscapeSequencesDemo.java > ...
1    public class EscapeSequencesDemo {
         Run | Debug
2        public static void main(String[] args) {
3            System.out.println(x:"A \"quoted\" String is");
4            System.out.println(x:"'much' better if you learn");
5            System.out.println(x:"the rules of \"escape sequences.\"");
6            System.out.println(x:"Also, \"\" represents an empty");
7            System.out.println(x:"String. Don't forget: use \\\"");
8            System.out.println(x:"instead of \" !");
9            System.out.println(x:"'' is not the same as \"");
10       }
11   }
12
```
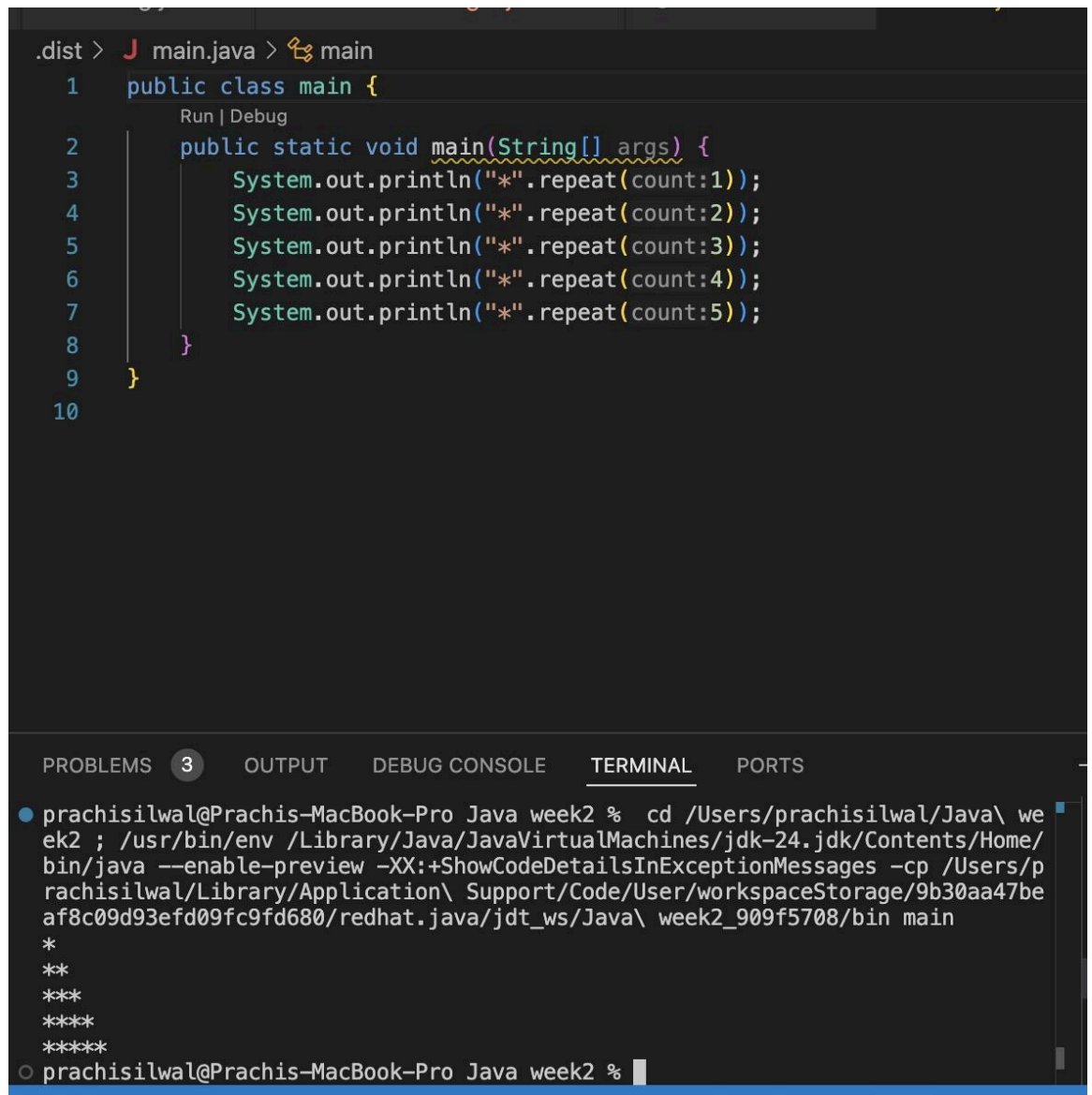
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
lication\ Support/Code/User/workspaceStorage/c92c4f100a92de55de3272137b4a3a76/
redhat.java/jdt_ws/Java\ week1_9
09f5707/bin EscapeSequencesDemo
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 "
prachisilwal@Prachis-MacBook-Pro Java week1 %
```

4. WAP that prints the following pattern:

```
*

**

***

****

*****
```

5. WAP prints the following pattern:

```
*********

*********

*********

*********
```

```
.dist > J main.java > ⅏ main
  1   public class main{
  2     💡
  3       static void printRows(int n) {          // prints n rows of 9 stars
  4           if (n == 0) return;
  5           System.out.println(x:"*********");
  6           printRows(n - 1);
  7       }
  8
      Run | Debug
  9       public static void main(String[] args) {
 10           printRows(n:5);
 11       }
 12   }
 13
```
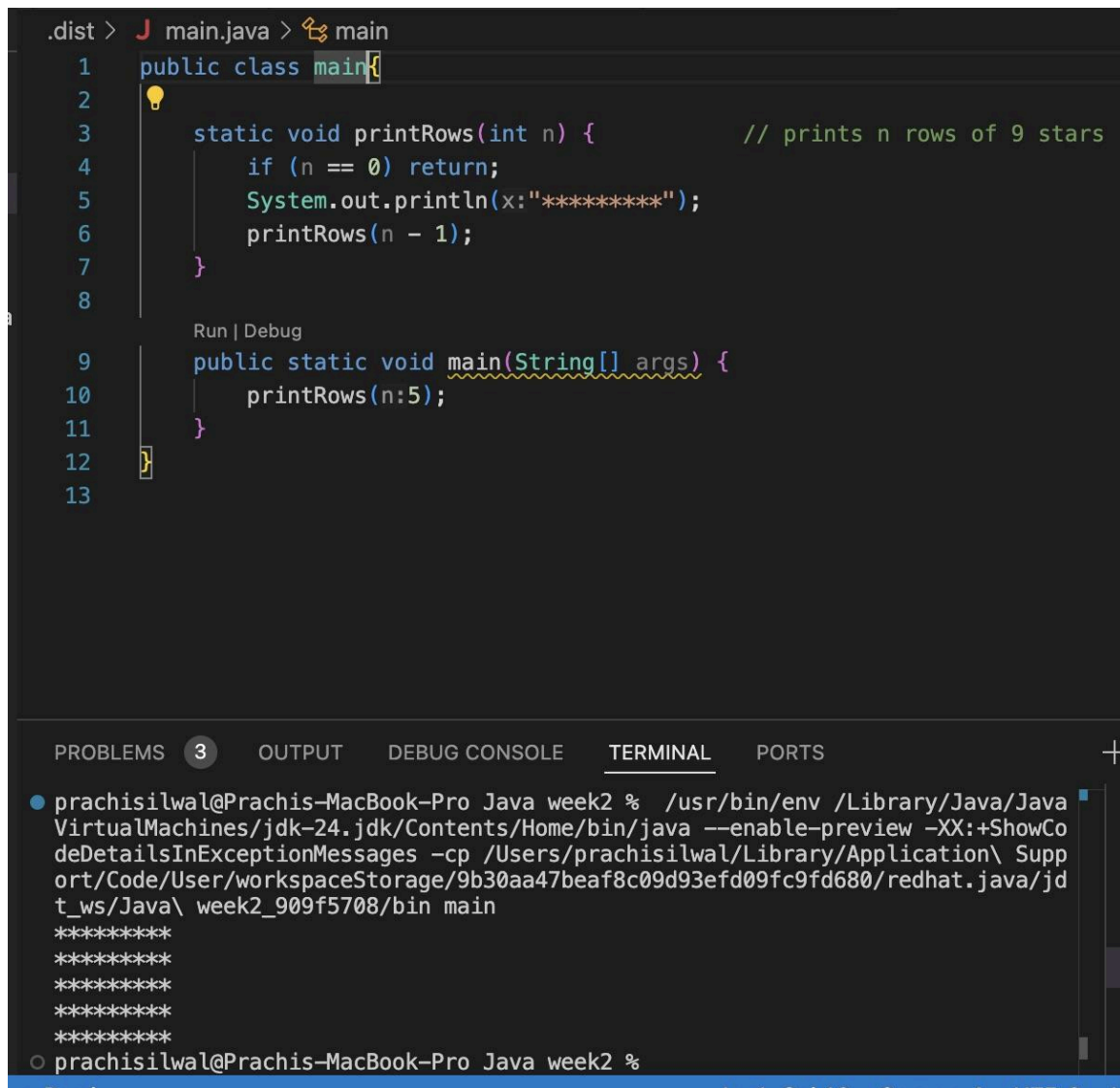
```
PROBLEMS  3    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS                      +

● prachisilwal@Prachis-MacBook-Pro Java week2 %  /usr/bin/env /Library/Java/Java
  VirtualMachines/jdk-24.jdk/Contents/Home/bin/java --enable-preview -XX:+ShowCo
  deDetailsInExceptionMessages -cp /Users/prachisilwal/Library/Application\ Supp
  ort/Code/User/workspaceStorage/9b30aa47beaf8c09d93efd09fc9fd680/redhat.java/jd
  t_ws/Java\ week2_909f5708/bin main
  *********
  *********
  *********
  *********
  *********
○ prachisilwal@Prachis-MacBook-Pro Java week2 %
```

6. WAP that prints the following output:

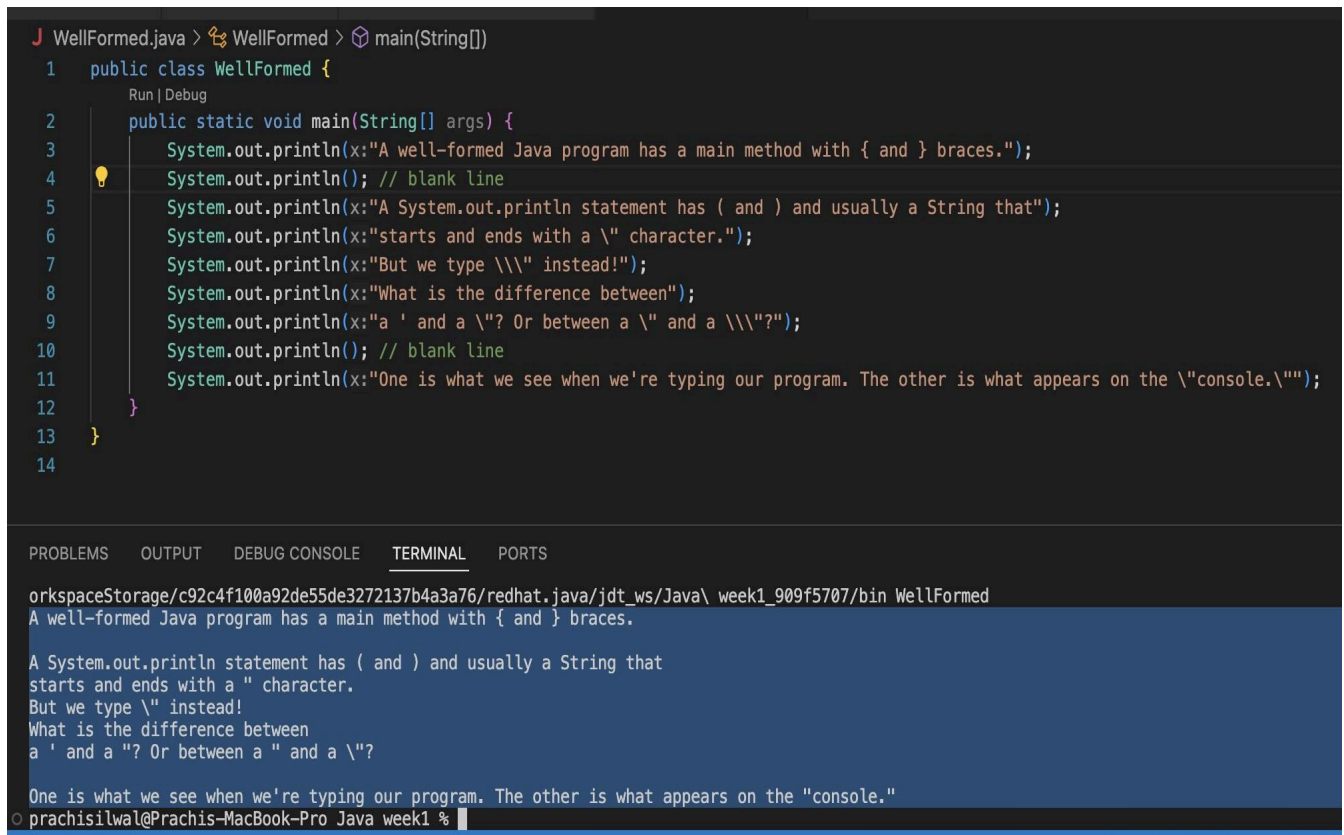A well-formed Java program has a main method with { and } braces.

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
J WellFormed.java > ⅏ WellFormed > ☉ main(String[])
1    public class WellFormed {
        Run | Debug
2        public static void main(String[] args) {
3            System.out.println(x:"A well-formed Java program has a main method with { and } braces.");
4            System.out.println(); // blank line
5            System.out.println(x:"A System.out.println statement has ( and ) and usually a String that");
6            System.out.println(x:"starts and ends with a \" character.");
7            System.out.println(x:"But we type \\\" instead!");
8            System.out.println(x:"What is the difference between");
9            System.out.println(x:"a ' and a \"? Or between a \" and a \\\"?");
10           System.out.println(); // blank line
11           System.out.println(x:"One is what we see when we're typing our program. The other is what appears on the \"console.\"");
12       }
13   }
14
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
orkspaceStorage/c92c4f100a92de55de3272137b4a3a76/redhat.java/jdt_ws/Java\ week1_909f5707/bin WellFormed
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."
prachisilwal@Prachis-MacBook-Pro Java week1 %
```