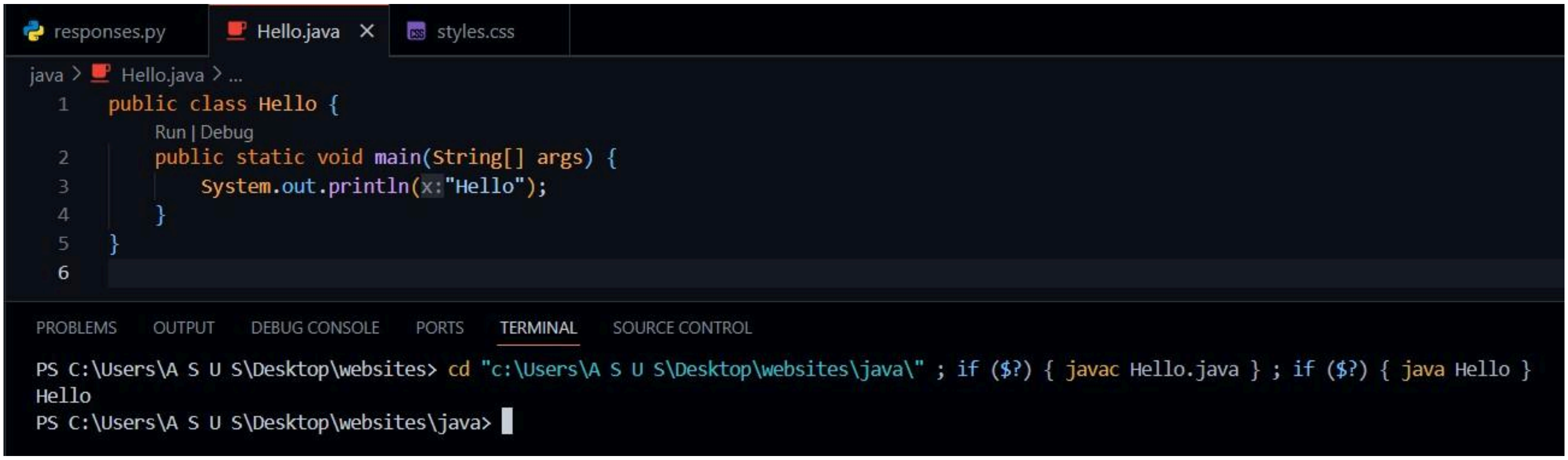
1. Write a program that prints Hello World! to the console.
   Save the program as Hello.java

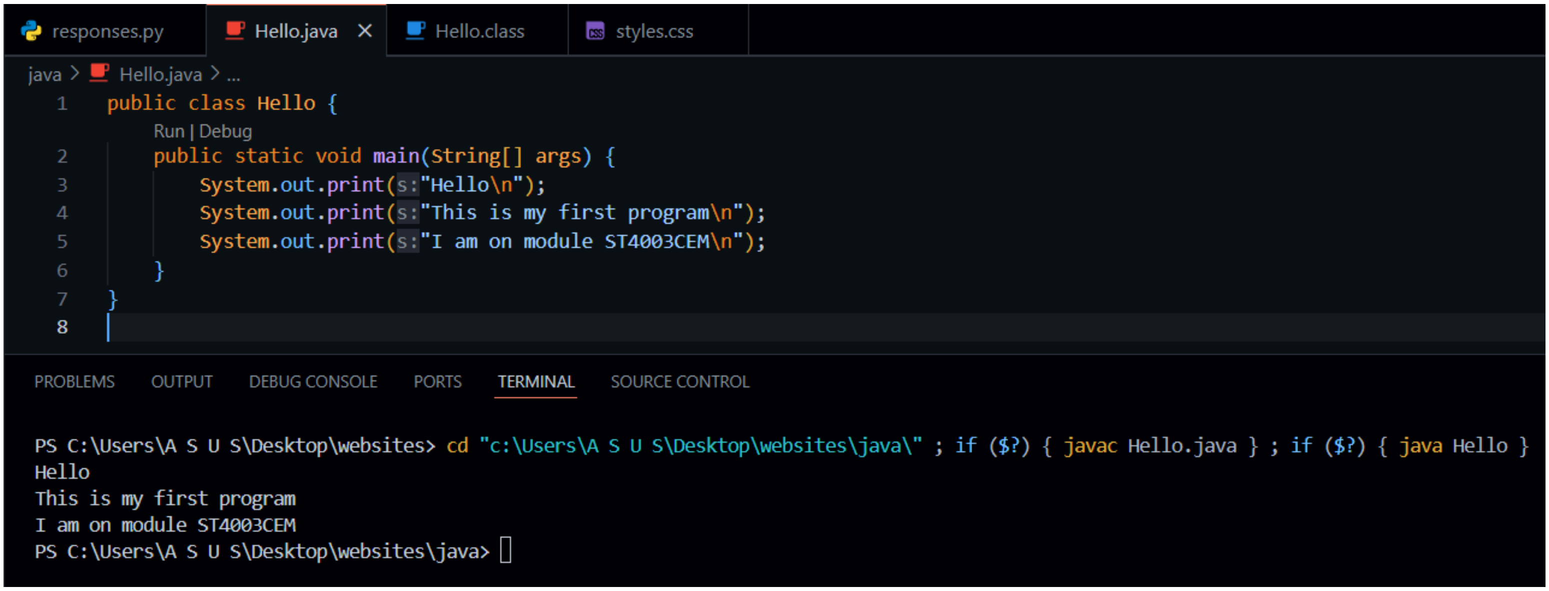


```java
public class Hello {
    public static void main(String[] args) {
        System.out.println(x:"Hello");
    }
}
```

```
PS C:\Users\A S U S\Desktop\websites> cd "c:\Users\A S U S\Desktop\websites\java\" ; if ($?) { javac Hello.java } ; if ($?) { java Hello }
Hello
PS C:\Users\A S U S\Desktop\websites\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.

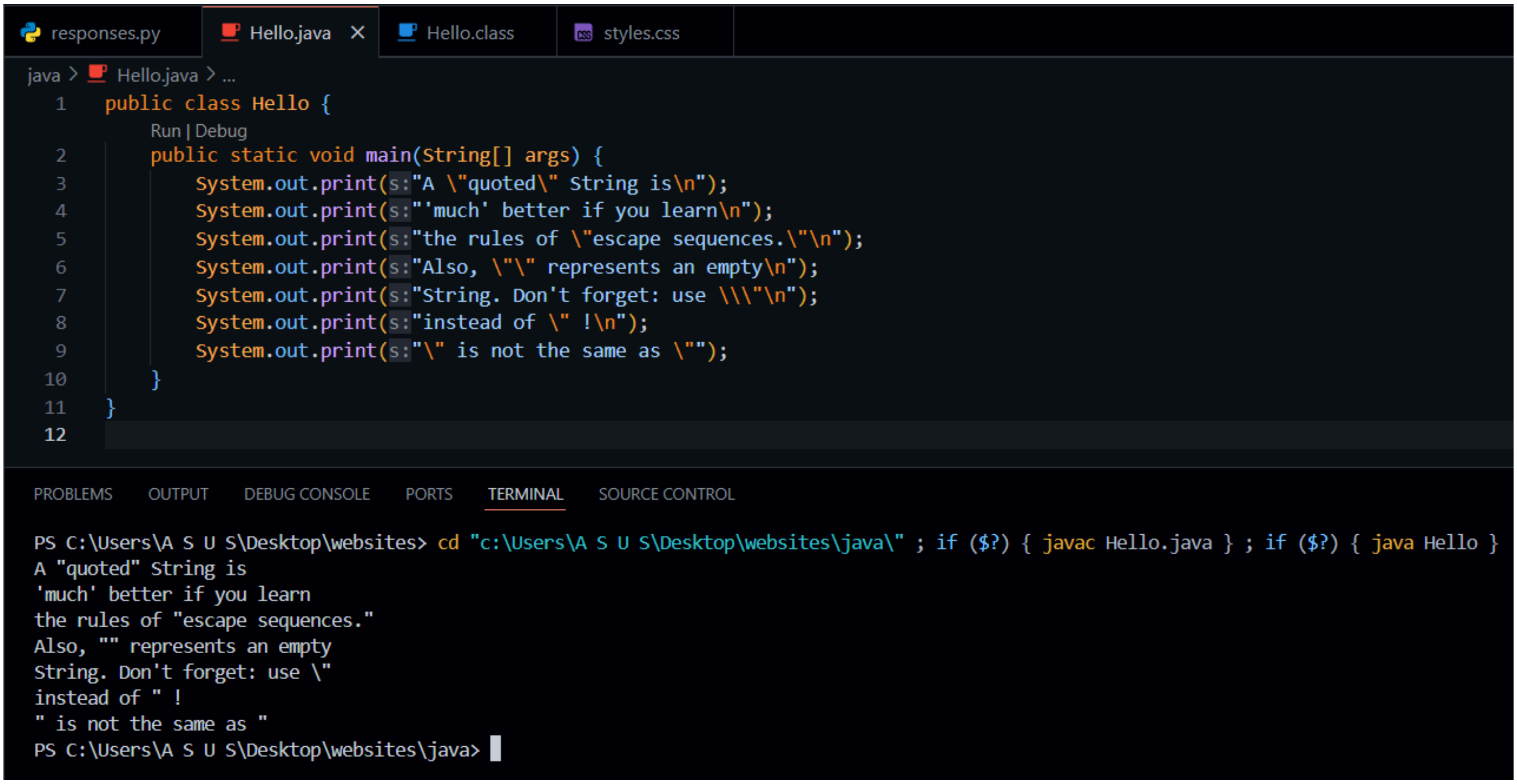


```java
public class Hello {
    public static void main(String[] args) {
        System.out.print(s:"Hello\n");
        System.out.print(s:"This is my first program\n");
        System.out.print(s:"I am on module ST4003CEM\n");
    }
}
```

```
PS C:\Users\A S U S\Desktop\websites> cd "c:\Users\A S U S\Desktop\websites\java\" ; if ($?) { javac Hello.java } ; if ($?) { java Hello }
Hello
This is my first program
I am on module ST4003CEM
PS C:\Users\A S U S\Desktop\websites\java>
```

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

```
PS C:\Users\A S U S\Desktop\websites> cd "c:\Users\A S U S\Desktop\websites\java\" ; if ($?) { javac Hello.java } ; if ($?) { java Hello }
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\A S U S\Desktop\websites\java> 
```

4. WAP that prints the following pattern:

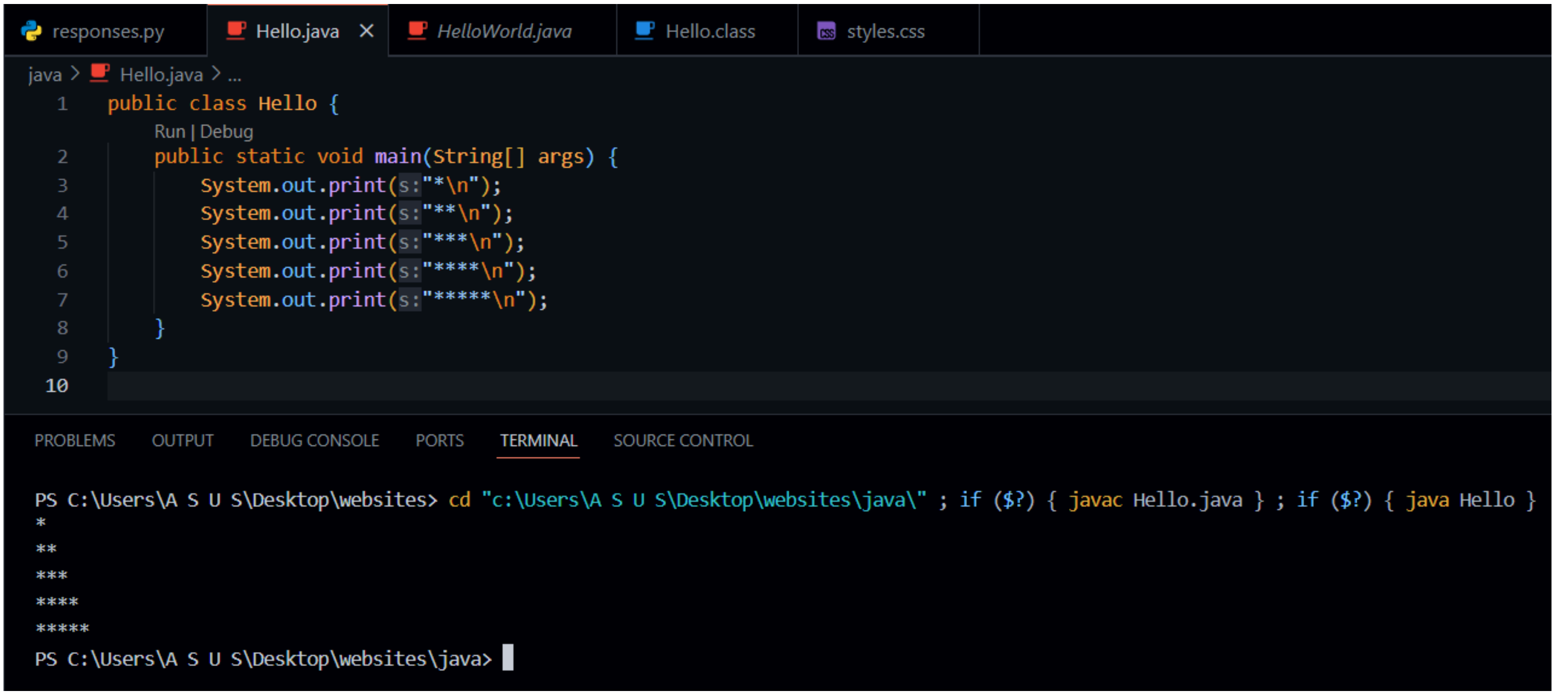
```
*

**

***

****

*****
```



```java
public class Hello {
    public static void main(String[] args) {
        System.out.print(s:"*\n");
        System.out.print(s:"**\n");
        System.out.print(s:"***\n");
        System.out.print(s:"****\n");
        System.out.print(s:"*****\n");
    }
}
```

```
PS C:\Users\A S U S\Desktop\websites> cd "c:\Users\A S U S\Desktop\websites\java\" ; if ($?) { javac Hello.java } ; if ($?) { java Hello }
*
**
***
****
*****
PS C:\Users\A S U S\Desktop\websites\java>
```

5. WAP prints the following pattern:

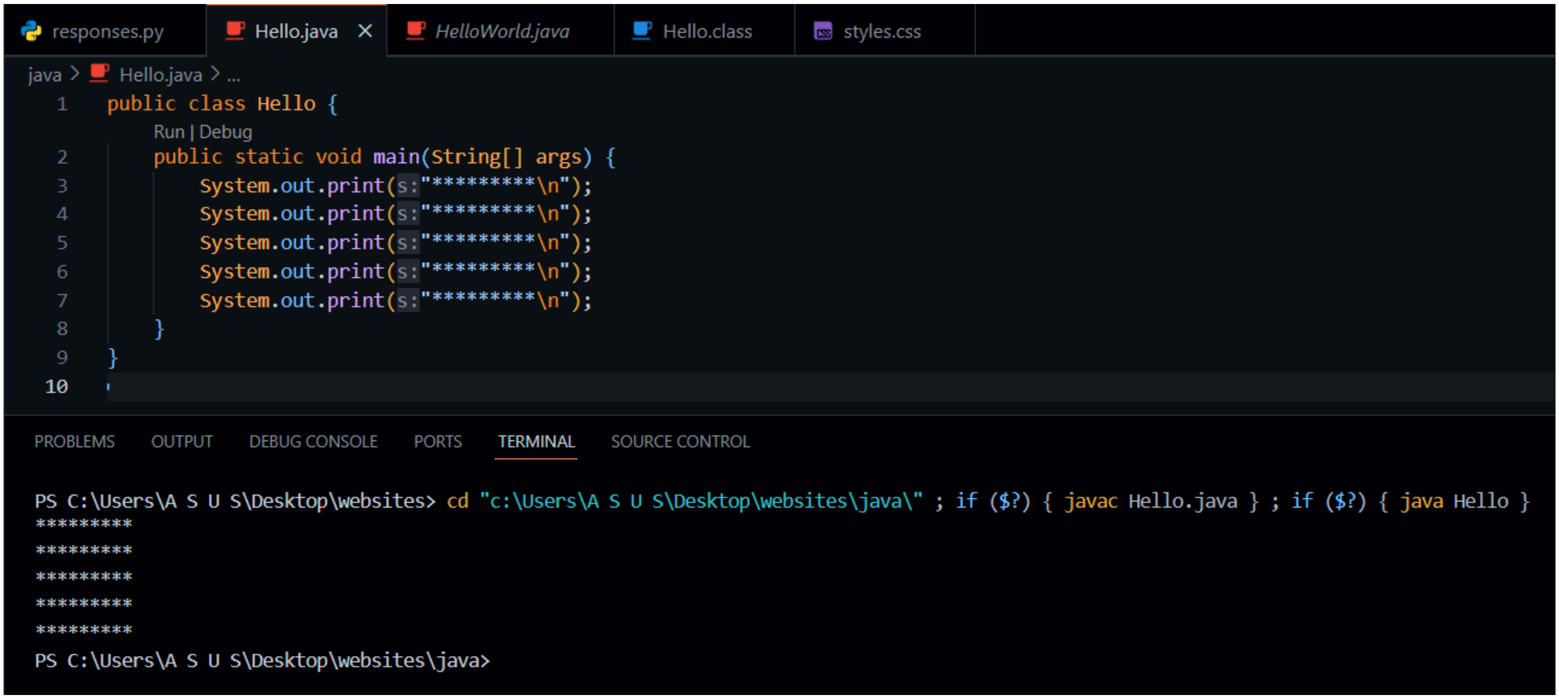
```
*********

*********

*********

*********

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

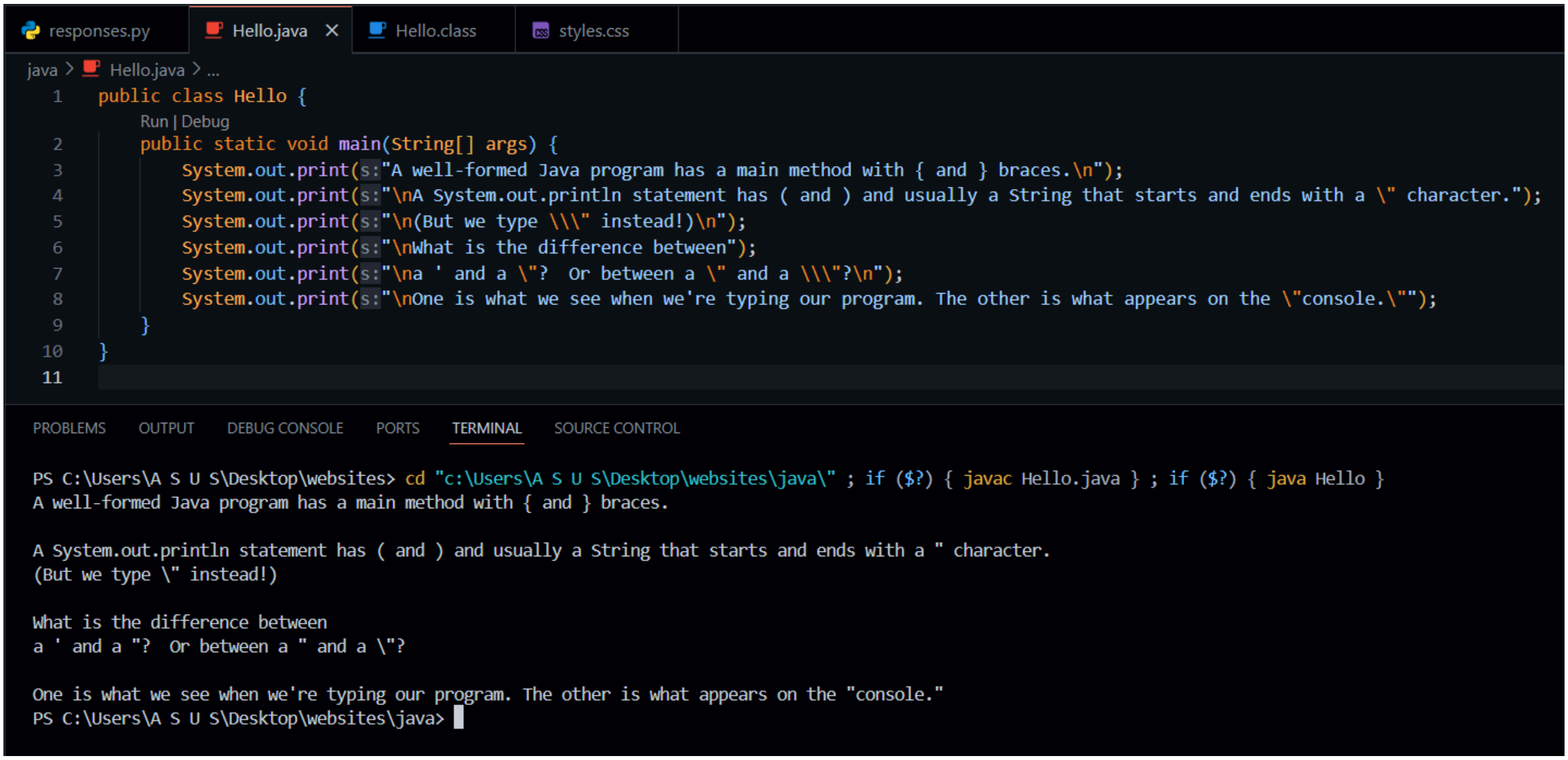


```java
public class Hello {
    public static void main(String[] args) {
        System.out.print(s:"*********\n");
        System.out.print(s:"*********\n");
        System.out.print(s:"*********\n");
        System.out.print(s:"*********\n");
        System.out.print(s:"*********\n");
    }
}
```

```
PS C:\Users\A S U S\Desktop\websites> cd "c:\Users\A S U S\Desktop\websites\java\" ; if ($?) { javac Hello.java } ; if ($?) { java Hello }
*********
*********
*********
*********
*********
PS C:\Users\A S U S\Desktop\websites\java>
```

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

```

```
PS C:\Users\A S U S\Desktop\websites> cd "c:\Users\A S U S\Desktop\websites\java\" ; if ($?) { javac Hello.java } ; if ($?) { java Hello }
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\A S U S\Desktop\websites\java> 
```