

## Practice Problems 2.3

### Printf and Strings

#### STRINGS

##### Methods

What would be the literal for each of the following statements? Assume `horse` was declared as a `String` and has the value of `"No sir, I don't like it"`.

- |  |                   |                                       |              |
|--|-------------------|---------------------------------------|--------------|
| 1) <code>horse.length();</code>        | <u>"22"</u>       | 4) <code>horse.substring(10);</code>  | <u>" "</u>   |
| 2) <code>horse.substring(4,12);</code> | <u>"IR, I DO"</u> | 5) <code>horse.charAt(18);</code>     | <u>"k"</u>   |
| 3) <code>horse.charAt(15)</code>       | <u>" "</u>        | 6) <code>horse.substring(2,5);</code> | <u>" SI"</u> |

##### The Fun with Concatenation

Assume the `String` `lawyer` is `"Harvey Dent"` and the `String` `villain` is `"Two-Face"`. What would the literal be for each problem:

- |  |                  |
|--|------------------|
| 7) <code>lawyer.substring(0,6) + villain.length();</code>  | <u>"Harvey7"</u> |
| 8) <code>lawyer.substring(7)+ villain.substring(3);</code> | <u>"d"</u>       |
| 9) <code>lawyer.length() + villain.length();</code>        | <u>"107"</u>     |
| 10) <code>"" + lawyer.length() + villain.length();</code>  | <u>" 107"</u>    |

#### PRINTF

Assume that `int` `num` is 56, `double` `dubSauce` is 156.7898, and `String` `greeting` is `"Howdy"`. For each question, state what the output is:

- |   |  |
|---|--|
| 11) <code>System.out.printf("%5d", num);</code>   | <u>"56"</u>  |
| 12) <code>System.out.printf("%10s", greeting);</code>   | <u>"greeting"</u>                                    |
| 13) <code>System.out.printf("%-10s", greeting);</code>  | <u>" "</u>   |
| 14) <code>System.out.printf("The rounded number is%6.1f", dubSauce);</code>                           | <u>"The rounded number is 156.8"</u>                 |
| 15) <code>System.out.printf("The string is %s and the number is %d", greeting, num, dubSauce);</code> | <u>"The string is greeting and the number is 56"</u> |