

True/False

1. The statement `int num = 34 + "45";` causes an error.
2. The value `51.34E-3` is greater than `5.134E03`.
3. The statement `++days;` causes the variable `days` to be incremented by 1.
4. After the statement `double num = 9 / 2;` executes, the variable `num` is equal to `4.5`.
5. The statement `num += Math.pow(2, 2);` causes the variable `num` to be increase by 4.
6. The `Val` method can be used to convert strings to numeric values that can be mathematically added together.
7. There is no primitive data type that we have studied in this course that can accurately store the value `12345678.90123`.
8. Casting is an error that has to do with `double` variables.
9. The `Double` class is an example of a wrapper class.
10. The `toString` method of the `Integer` class can be used to convert a string that only contains binary digits to a base 10 integer.
11. `Double` is a primitive data type.
12. The value stored in `result` after the statement `int result = 4 - 2 + 2;` is 4.
13. An `int` variable uses 4 bytes of memory.
14. After `String name = "Bob";` executes, `System.out.println(String.length(name));` will display 3
15. The `Scanner` class is used for getting input from the user.

Fill in the Blank

16. Loss of _____ is an error that has to do with the `double` data type.
17. _____ for the `int` data type occurs at approximately 2 billion.
18. The _____ class is immutable.
19. To _____ a variable means to temporarily change its data type in a statement.

Write the Code

20. Write a single statement that displays the next largest whole number that is greater than or equal to the value currently stored in the `double` variable `gradePointAverage`. You can assume that `gradePointAverage` is already declared and that it stores a positive number.
21. Write a single assignment statement that efficiently assigns the value of 3 to the fourth power to the variable `result`.
22. Write a single assignment statement that converts the string value stored in the `String` variable `zipCode` into a numeric integer and that stores that integer into the variable `num`. You can assume that `zipCode` and `num` have already been declared as variables.
23. Write a single statement that displays the `double` variable `gradePointAverage` in such a way that only the values to the left of its decimal point are displayed while the digits to the right of the decimal place are not displayed. You can assume that `gradePointAverage` is a positive number.
24. Write a single statement that displays only the last letter of the `String` variable `name`. You can assume that there is at least one character in `name`.
25. Write a method named `everyOtherLetter` that accepts a `String` parameter and returns a new `String` that is formed by joining all of the characters in odd index positions of the parameter. For example, if the parameter is "Wyomissing" then "ymsig" is returned since the letters y, m, s, i, and g are in the odd-numbered positions 1, 3, 5, 7, and 9 of the original string.