COE 212
Engineering Programming

Summer 2018
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Quiz II

Problem I

1) Which of the following statements correctly stores in the variable called `val` a random value between 2 (inclusive) and 7 (inclusive)? Assume that `rnd` is a `Random` object that was created correctly.
   a. `int val = rnd.nextInt(7) + 1;`
   b. `int val = rnd.nextInt() % 6 + 2;`
   c. Both of the above
   d. **None of the above**

2) Which of the following correctly prints the last 2 characters of the `String` variable called `str`? Assume that `str` was created correctly and that it stores more than 2 characters.
   a. `System.out.print(str.susbtring(length()-2));`
   b. `System.out.print(str.susbtring(length()-2, length()));`
   c. Both of the above
   d. **None of the above**

3) Which of the following results in a compile-time error? Assume that the `DecimalFormat` object called `fmt` was properly created.
   a. **double value = fmt.format(2.345);**
   b. `Double value = Double.parseDouble(fmt.format(2.345));`
   c. Both of the above result in a compile-time error
   d. Neither (a) nor (b) result in a compile-time error

4) Which of the following statements is an example of autoboxing?
   a. `double value = new Double(1.234);`
   b. **Double value = 1.234;**
   c. `Double value = new Double(1.234);`
   d. None of the above

5) Which of the following is not **static**?
   a. `PI`
   b. `parseInt`
   c. **replace**
   d. All of the above are static

Problem II

1. The following code fragment creates two variables called `a` and `b` that are aliases of each other.
   ```
   Integer a = 23;
   Integer b = new Integer(45);
   a = b;
   ```
   Answer: **True**   False

2. The following statement stores in `val` a random `int` value in the range of -1 (inclusive) to 7 (inclusive):
   ```
   int value = (int) Math.random() * 9 - 1;
   ```
   Answer: True   **False**

3. The following statement prints out: `1`
   ```
   System.out.print(Math.pow(4, 1/2));
   ```
   Answer: True   **False**

4. The following statement prints out: `exam`
   ```
   System.out.print('e' + 'x' + "am");
   ```
   Answer: True   **False**

5. The following statement prints out: `NaN`
   ```
   System.out.print(
   Math.sqrt(Math.PI - Math.pow(3, 2)));
   ```
   Answer: **True**   False