

CS 170 Proficiency Quiz 4-Sample

Use **DrJava** to write a **String function**. You have 30 minutes to complete the problem. You may not access any notes (other than the Java Quick Reference I've supplied), files, or communicate with anyone in any way (including checking your email or looking up files on the Q: drive.)

When you have finished and submitted the quiz, check with me to make sure that I have received it.

Writing String Functions

Write the function named **insideOut2**. The function has one input: a **String str** that is at least 2 characters long and of even length. The function output is a new **String** where the **middle two characters** have been removed and placed at the end. Here some sample input and output:

- **insideOut2** ("Carton") returns "Caonrt" // rt moved to end
- **insideOut2** ("Hi") returns "Hi" // Hi removed and then moved to end, so no change.
- **insideOut2** ("Barbara Anne") returns "Barba Annera" // ra moves end.

Graded 100% on correctness. Use the **Check** button to test.

Existing String Functions

```
String s = "Steve Gilbert "; //just an example
int len = s.length(); // number of characters in s
String s2 = s.substring(0, 5); // s2 = "Steve"
String s2 = s.substring(6); // s2 = "Gilbert"
char first = s.charAt(0); // first = 'G'
char last = s.charAt(len - 1); // last = 't'
int middle = len / 2; // position of middle character (odd-length string)
int pos = s.indexOf(" "); // 5 – the position of the space (first char is 0)
```

Function Definition Syntax Examples

//String function with 2 String parameters

```
public static String pasteEm(String a, String b) //static is optional
{
    String result = ""; //Function "output" variable
    result = a + b; // Processing (converting input into output)
    return result; // Return the result
}
```

public int exTwo(String a) {...} *//int function with 1 String parameter*

public String exThree(int num) {...} *//String function with 1 int parameter*