

Section Activity #3: What's the Output?

Your Names: _____

Directions: In groups of two (or three, if need be), complete the following activity. This section activity will be graded; all students in the group will receive the same score. Make sure that the names of all group members are on the page you submit to your section leader. Section Meeting 5 (2014/02/12-13)

Task: The program shown below is a syntactically-correct Java program. What will it output if compiled and executed? (No, you can't run Java to find out; pretend this is the exam.)

```
1 public class Sa03
2 {
3     private static String exchange (String message, int location, String replacement)
4     {
5         String temp = message.substring(0,location);
6         System.out.println("In exchange:  temp = " + temp);
7         message = temp + replacement + message.substring(++location);
8         return message;
9     }
10
11     private static String swap (String message, int start, int end,
12                               String replacement)
13     {
14         StringBuilder temp;
15         temp = new StringBuilder(message);
16         temp.delete(start,--end);
17         System.out.println("In swap:  temp = " + temp);
18         temp.insert(start,replacement);
19         return temp.toString();
20     }
21
22     public static void main (String [] args)
23     {
24         String message = "I unwrapped a message for you.";
25         message = exchange(message, 14, "a");
26         System.out.println("In main:  message = " + message);
27         message = exchange(message, 13, "p");
28         System.out.println("In main:  message = " + message);
29         message = swap(message, 2, 5, "m");
30         System.out.println("At end of main:  message = " + message);
31     }
32 }
```