

Solution to Section #4

Portions of this handout by Eric Roberts and Patrick Young

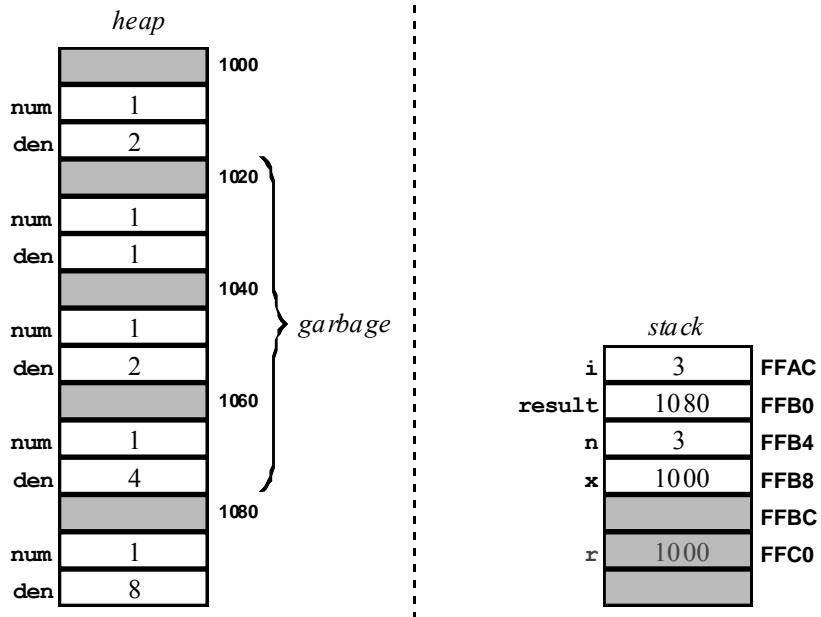
1. Adding commas to numeric strings

```
private String addCommasToNumericString(String digits) {
    String result = "";
    int len = digits.length();
    int nDigits = 0;
    for (int i = len - 1; i >= 0; i--) {
        result = digits.charAt(i) + result;
        nDigits++;
        // we also need i > 0 so we don't have a comma before the
number
        if (((nDigits % 3) == 0) && (i > 0)) {
            result = "," + result;
        }
    }
    return result;
}
```

2. Deleting characters from a string

```
private String removeDecreasingChars(String str) {
    String result = "";
    for (int i = 0; i < str.length(); i++) {
        char curChar = str.charAt(i);
        if (result.equals("")) ||
            result.charAt(result.length()-1) < curChar ){
            result += curChar;
        }
    }
    return result;
}
```

3. Heap/Stack diagrams



4. Tracing method execution

