Questions

- 1. Given two integer arrays, array A and array B, of random length, remove elements that appear in B from A. Both A and B may contain duplicates. Can you do the same with string arrays? If you are multilingual, please provide an implementation in 2 programming languages. Please comment on your implementation, and the tradeoffs you have chosen. Please provide an ability to test.
- 2. Implement a function that reverses the contents of a character string efficiently. Please provide an ability to test.
- 3. Given the query 'SELECT * FROM t1 join t2 on t1.f = t2.f WHERE ...'-- what would be the different steps to consider in order to speed up the query?
- 4. Explain what the following code is doing; correct any problems and explain:

- 5. Below is some basic HTML markup. Create JavaScript code to do the following:
 - When I click 'Create dates header':
 - The 'Create dates header' button should not be displayed
 - I should see some new text 'Dates:'
 - I should see a 'Display dates' button
 - When I click the 'Display dates' button
 - I should see the dates '5/1/2011' through '5/7/2011' added to the empty divs
 - The dates should be displayed in red

Requirements:

- Use the json data defined in the head tag to display the text
- Use the second button that is empty for 'Display dates'
- Consider the placement of the 'Dates:' text visually and logically when we click 'Create date header'
- Each date should be displayed in an individual div
- Don't use a JavaScript library
- If possible, try to only use JavaScript to do this

```
<!DOCTYPE html>
<html>
<head>
<script>
var json content = { "p text": "Dates:",
                     "button text": "Display dates"};
var json date content = { "day1": "5/1/2011",
                           "day2": "5/2/2011",
                           "day3": "5/3/2011",
                           "day4": "5/4/2011",
                           "day5": "5/5/2011",
                           "day6": "5/6/2011",
                           "day7": "5/7/2011"};
</script>
<style>
.red text { color:#ff0000; }
.no display { display:none; }
</style>
</head>
<body>
```

```
<button>Create dates header</button>
<button class="no_display"></button>
<div class="no_display"></div>
</body>
</html>
```