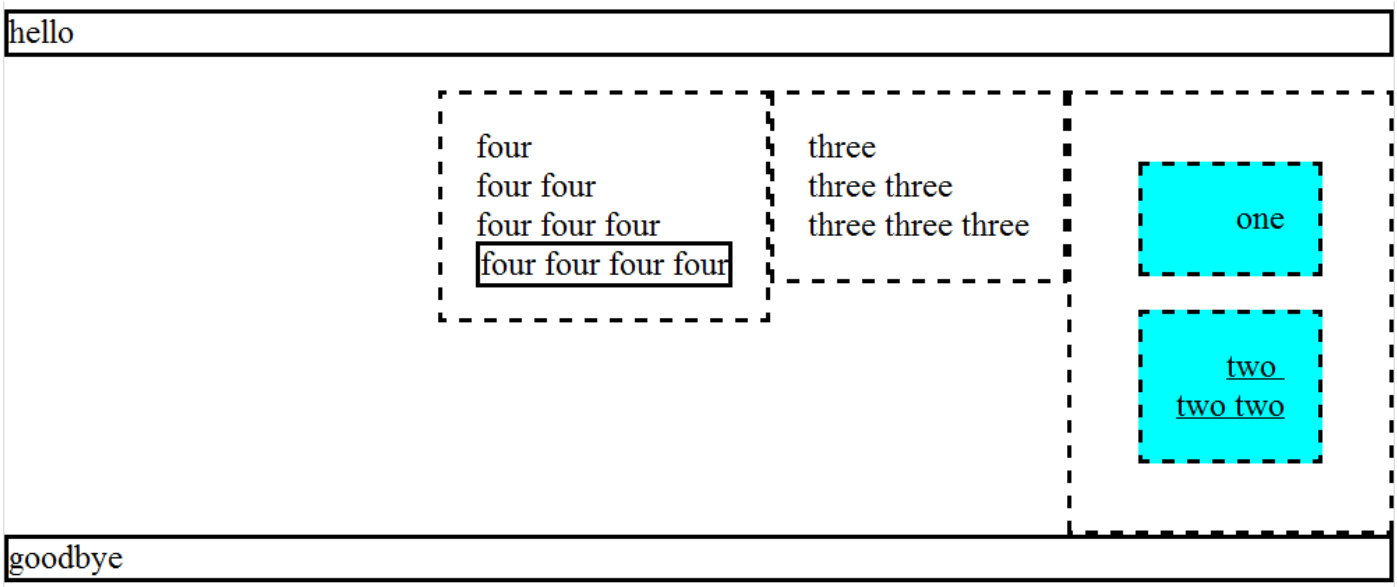
CSE 190 M, Spring 2012, Final Exam
ANSWER KEY

1. HTML / CSS Tracing



2. PHP

```
<!-- order.php -->
<form action="order-submit.php" method="post">
  <div>
    Food item:
    <select name="food">
      <?php foreach (glob("*.jpg") as $image) { ?>
        <option> <?= str_replace(".jpg", "", $image) ?> </option>
      <?php } ?>
    </select>
  </div>
  <div> Quantity: <input type="text" name="quantity" size="2" /> </div>
  <div> <input type="submit" value="Order" /> </div>
</form>
```

```
<?php
# order-submit.php
if (!isset($_POST["food"]) || !isset($_POST["quantity"])) {
  header("HTTP/1.1 400 Invalid Request");
  die();
}

$food = $_POST["food"];
$quantity = $_POST["quantity"];
$found = FALSE;
foreach (file("inventory.txt") as $line) {
  list($item, $number, $price) = explode("\t", $line);      # list() is optional
  if ($item == $food && $number >= $quantity) {
    $total = $quantity * $price;
    ?>

    <p>
      Order successful!
      $<?= $total ?> is your total price.
      Here is what you ordered:

      <?php for ($i = 0; $i < $quantity; $i++) { ?>
        <img src="<?= $food ?>.jpg" alt="food" />
      <?php } ?>
    </p>

    <?php
    $found = TRUE;
    break;                                                  # optional
  }
}

if (!$found) { ?>
  <p>Sorry, we don't have <?= $quantity ?> of '<?= $food ?>' in stock.</p>
<?php } ?>
```

3. JavaScript / DOM

```
window.onload = function() {
    document.getElementById("find").onclick = findClick;
};

function findClick() {
    document.getElementById("palindromes").innerHTML = "";
    var words = document.getElementById("phrase").value.split(" ");
    var count = 0;
    for (var i = 0; i < words.length; i++) {
        if (document.getElementById("min").value &&
            words[i].length < document.getElementById("min").value) { continue; }
        if (document.getElementById("max").value &&
            words[i].length > document.getElementById("max").value) { continue; }
        if (isPalindrome(words[i])) {
            var li = document.createElement("li");
            li.innerHTML = words[i];
            if (count % 2 == 0) {
                li.style.backgroundColor = "#cccccc";
            }
            document.getElementById("palindromes").appendChild(li);
            count++;
        }
    }
    document.getElementById("count").innerHTML = count + " total palindrome(s).";
}

function isPalindrome(s) {
    s = s.toLowerCase();
    for (var i = 0; i < s.length / 2; i++) {
        if (s[i] != s[s.length - 1 - i]) { return false; }
    }
    return true;
}
```

4. Regular Expressions

a) `/^[a-zA-Z]{4}$/`

b) `/^3[47][0-9]{13}$/`

c) `/^.*\/.*\.(html|css|js|php)$/`