

# Extra midterm question solutions

1.

```
<div id="page">
  <h1></h1>

  <ul>
    <li><a href="">Home</a></li>
    <li><a href="">Festivals</a></li>
    <li><a href="">Breweries</a></li>
    <li><a href="">News</a></li>
    <li><a href="">WABL</a></li>
    <li><a href="">About Us</a></li>
    <li><a href="">Contact</a></li>
  </ul>

  <div id="content">

    <h2>What is WA.B.L?</h2>
    <p>WA.B.L. is a community of <strong>WA</strong>shington <strong>B</strong>eer
<strong>L</strong>overs celebrating the <strong>FRESH, LOCAL, AWARD-
WINNING</strong> craft beer produced in our state.</p>
    <p>It's a Washington Beer Fan Club!</p>

    <div id="join">
      <br/>
      <a href="">JOIN WA.B.L NOW!</a>
    </div>

    <h2>WA.B.L. Perks</h2>
    <p>WA.B.L.'ers enjoy monthly <strong>invitation-only</strong> events at
various breweries, brewpubs, tasting rooms, and other businesses promoting tasty
Washington beer.</p>
    <p>Each year, upon renewal of their membership, WA.B.L.'ers receive a
<strong>cool t-shirt</strong> with a design unique to that year, listing all
member breweries.</p>

    <h2>WA.B.L. Passport</h2>
    <p>WA.B.L.'ers are also encouraged to visit breweries when they're out
traveling around the state. Each member is issued a <strong>passport</strong> in
which they collect stamps from the breweries they visit.</p>
    <p>Collecting stamps from WA breweries can get you some great prizes!</p>
  </div>
</div>
```

```
body {
  background-color: #FFB131;
  font-family: sans-serif;
}

#page {
  width: 950px;
  margin: 0 auto;
  background-color: white;
  border-bottom: solid 5px black;
}

#main {
  padding: 0 1.5em; /* margin also works */
}

#join {
  float: right;
  background-color: #FBC57B;
  padding: .75em;
  margin: 1em;
  font-size: 190%;
  font-weight: bold; /* not specified in problem */
}

ul {
  text-align: center;
  font-weight: bold;
  padding: 0; /* will let slide */
  /* list-style-type: none; -- not needed but OK */
  background-color: black; /* not specified in problem */
}

li {
  display: inline;
  padding: 0 1.5em; /* margin DOES NOT work */
  line-height: 2em;
  /* height: 2em; -- not correct but allowed */
}

li a {
  color: #FFB131;
  text-decoration: none;
}

h2 {
  text-decoration: underline;
}
```

2.

```
<div id="page">
  <div id="left" class="column">
    <h1></h1>
    <ul>
      <li><a href="">BEER</a></li>
      <li><a href="">BREWERIES</a></li>
      <li><a href="">S.N.O.B</a></li>
      <li><a href="">BLOG</a></li>
      <li><a href="">EVENTS</a></li>
      <li><a href="">PRESS</a></li>
      <li><a href="">ABOUT</a></li>
    </ul>
    <p></p>
  </div>

  <div id="center" class="column">
    <h2>S.N.O.B</h2>
    <p>Now you can show your support for our world-class beers by becoming an <a
href="">Enthusiast Member</a> of the Oregon Brewers Guild. Our Enthusiast Members
– we call them SNOBs (Supporters of Native Oregon Beer) are an integral link in
what we like to call the “beer chain” that connects suppliers, brewers, retailers
and consumers.</p>
    <p>As a SNOB, you will be able to show off your impeccable taste in malt
beverages and at the same time get a <a href="">backstage pass</a> to see what’s
going on behind the scenes in Oregon’s craft brewing industry.</p>
    <p><strong>SNOBs receive the following Membership Benefits:</strong></p>
    <ul>
      <li>Current SNOB shirt is Dusk Blue with Vermillion lettering and list of
members on the back.</li>
      <li>An official SNOB membership card.</li>
      <li>Think Oregon Drink Oregon Bumper Sticker.</li>
      <li>“SNOB Stories” monthly <a href="">e-mail newsletter</a></li>
      <li>Invitation to regional “Guild Gatherings”</li>
      <li>A “SNOB” T-shirt</li>
      <li>Discount on tickets on events.</li>
    </ul>
    <p></p>
  </div>
</div>
```

```
body {
  background-color: #1A1A19;
  font-family: Georgia, serif;
}

#page {
  background-color: #E2D1BB;
  width: 50em;
  margin: 0 auto;
  overflow: hidden;
}

.column {
  float: left;
  margin: 1em;
}

#left {
  width: 8em;
}

h1 {
  text-align: center;
}

#left ul {
  list-style-type: none;
  padding: 0;
}

#left a {
  font-weight: bold;
  color: #C5833B;
  text-decoration: none;
  line-height: 1.75em;
}

#center {
  width: 30em;
  padding: 0 4em;
  background-color: white;
}
```

3.

## HTML / CSS Coding

```
<div id="main">
  <h1> <span class="highlight">Wikipedia - Geneva</span> </h1>
  <p>Geneva is the second-most populous city in ...</p>
  
  <p>Geneva is widely regarded as a global city, ...</p>
  <p>Geneva is also the name of Geneva Francine Stepp, ...</p>
  <ul>
    <li>a desktop wallpaper</li>
    <li>the subject of a recent midterm exam</li>
  </ul>
</div>
<div id="info">
  <h1>Geneva, the name</h1>
  <p>
    (f) English
    Possibly a shortened form of Genevive, or possibly from
    the name of the city in Switzerland.
  </p>
  <p>Similar names:</p>
  <ul>
    <li>Jenna</li>
    <li>Jennifer (Jenny)</li>
    <li>Genevieve</li>
    <li>Genevive</li>
  </ul>
</div>
```

```
/* CSS code */
body {
    background-image: url(bg.jpg);
    background-repeat: no-repeat;
    font-family: "Verdana", sans-serif;
    font-size: 14pt;
}
.highlight {
    background-color: yellow;
    border: 5px solid orange;
}
#main {
    width: 50%;
    margin-left: auto;
    margin-right: auto;
}
#main img {
    float: left;
    margin-right: 1em;
}
#info {
    border: 5px solid red;
    font-size: 9pt;
    padding: 1em;
    position: absolute;
    right: 1em;
    top: 1em;
    width: 20%;
}
#info li {
    font-style: italic;
}
```

#### 4. CSS

With any code problem, there are always several correct solutions. Here is one:

```
body { text-align: center; font-family: monospace; }
#div { background-color: yellow; font-weight: bold; }
div span { float: left; border: 2px solid black; }
.div, #span { float: right; width: 25%; border: 2px solid black; }
#span { clear: right; font-style: italic; }
.span { clear: right; border-top: 2px dashed black; }
```

#### 5. SQL (2 solutions shown)

```
SELECT DISTINCT t.name, c.name
FROM teachers t
JOIN courses c ON c.teacher_id = t.id
JOIN grades g1 ON g1.course_id = c.id
JOIN grades g2 ON g2.course_id = c.id
WHERE g1.student_id <> g2.student_id
AND g1.grade <= 'C-' AND g2.grade <= 'C-';
```

```
SELECT DISTINCT t.name, c.name
FROM teachers t
JOIN courses c ON c.teacher_id = t.id
JOIN grades g1 ON g1.course_id = c.id
JOIN students s1 ON s1.id = g1.student_id
JOIN grades g2 ON g2.course_id = c.id
JOIN students s2 ON s2.id = g2.student_id
WHERE s1.name < s2.name
AND g1.grade <= 'C-' AND g2.grade <= 'C-';
```

#### 6.

```
-- actors who have appeared twice with the same director --
SELECT DISTINCT d.first_name, d.last_name, a.first_name, a.last_name
FROM actors a
JOIN roles r1 ON r1.actor_id = a.id
JOIN roles r2 ON r2.actor_id = a.id
JOIN movies_directors md1 ON md1.movie_id = r1.movie_id
JOIN movies_directors md2 ON md2.movie_id = r2.movie_id
JOIN directors d ON md1.movie_id = d.id AND md2.movie_id = d.id
WHERE md1.movie_id != md2.movie_id;
```

7.

```
SELECT DISTINCT a.first_name, a.last_name
FROM actors a
JOIN roles r1 ON r1.actor_id = a.id
JOIN movies m ON m.id = r1.movie_id
JOIN movies_genres mg ON mg.movie_id = m.id
JOIN roles r2 ON r2.actor_id = a.id
JOIN roles r3 ON r3.actor_id = a.id
WHERE r1.movie_id <> r2.movie_id
AND r1.movie_id <> r3.movie_id
AND r2.movie_id <> r3.movie_id
AND mg.genre = "Action"
ORDER BY a.last_name, a.first_name;
```

8.

```
-- names of the Martin Scorsese movies where he also appeared as an actor
SELECT m.name
FROM movies m
JOIN roles r ON m.id = r.movie_id
JOIN actors a ON a.id = r.actor_id
JOIN movies_genres mg ON mg.movie_id = m.id
JOIN movies_directors md ON md.movie_id = m.id
JOIN directors d ON d.id = md.director_id
WHERE a.first_name = "Martin" AND a.last_name = "Scorsese"
AND d.first_name = "Martin" AND d.last_name = "Scorsese"
AND mg.genre = "Drama"
ORDER BY m.name;
```