

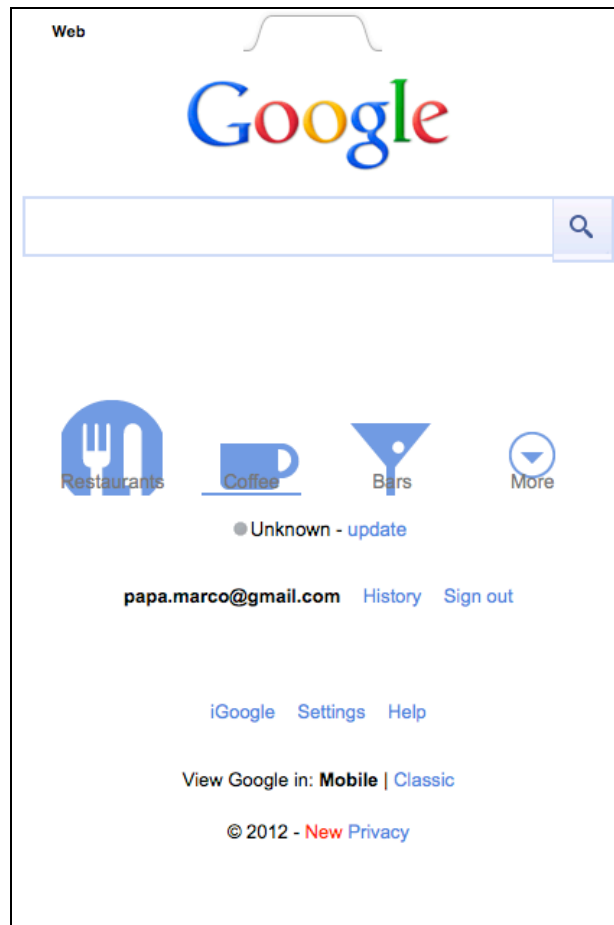
Computer Science 571 Exam #1
Prof. Papa
Thursday, October 9, 2014, 5:30pm – 6:40pm

Name:

Social Security or Student Id Number:

1. This is a closed book exam.
2. Please answer all questions.
3. Place all answers on the exam and return the entire exam

HTTP QUESTIONS [20 PTS]



The picture above is a snapshot of an iPhone, accessing Google Mobile. Below, are the HTTP headers between the iPhone and Google.

Transaction 1:

http://google.com/

GET / HTTP/1.1

Host: google.com
User-Agent: Mozilla/5.0 (iPhone; U; CPU iPhone OS 3_0 like Mac OS X; en-us) AppleWebKit/528.18 (KHTML, like Gecko) Version/4.0 Mobile/7A341 Safari/528.16
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip, deflate
Connection: keep-alive
Cookie: rememberme=true;
SID=DQAAALYAAAAOxSu9gLe_6MAJNuIGaUI_yJdQ0QWUWcpQsfOTEistdIDmSJZsy5JFCh7NldGmMHJkFQIHxud0ThLmuJz901DlclUzI7hrD755ZvuA3Cf5U0mv4UT7eu_oxXNFxPwAsXvjEi0TnpjY7TgfuZLjSBVgW8EP_zhUC99XkK5OQDFST0MrPVqa2S-4rHhL1N06UuOBkTN4AlluzZNWzX-cNvK2fWh2K-CjnU1QaLGII9VzbqAlR_plGLuyEVplglvRdMw;
PREF=ID=7c6e6b3cd9a5942f:U=9f44cf0a8279d4ac:FF=0:TM=1303788727:LM=1329725620:GM=1:S=jWjIj_kEdiM2B96x; HSID=AUqWe6aXETXwIKOsF; APISID=A3CWxKT-sm9ltGqG/ADSVUh9mFFvh2vAhG; NID=57=e5Q8Xz-stt_quQcEEBoXnYgHQnQy3mm0fSg53PazgSopWb-LamVecmHDrSotyLgzMbgCCtgYkuOp6udRm8ql2XbbggDfBUtIQz5D86wOYLG321Lk262PuDu_AmE2ypMr; PP_TOS_ACK=2

HTTP/1.1 301 Moved Permanently
Location: http://www.google.com/
Content-Type: text/html; charset=UTF-8
Date: Mon, 20 Feb 2012 08:35:40 GMT
Expires: Wed, 21 Mar 2012 08:35:40 GMT
Cache-Control: public, max-age=2592000
Server: gws
Content-Length: 219
X-XSS-Protection: 1; mode=block
x-frame-options: SAMEORIGIN

Transaction 2:

http://www.google.com/

GET / HTTP/1.1

Host: www.google.com
User-Agent: Mozilla/5.0 (iPhone; U; CPU iPhone OS 3_0 like Mac OS X; en-us) AppleWebKit/528.18 (KHTML, like Gecko) Version/4.0 Mobile/7A341 Safari/528.16
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip, deflate
Connection: keep-alive
Cookie: rememberme=true;
SID=DQAAALYAAAAOxSu9gLe_6MAJNuIGaUI_yJdQ0QWUWcpQsfOTEistdIDmSJZsy5JFCh7NldGmMHJkFQIHxud0ThLmuJz901DlclUzI7hrD755ZvuA3Cf5U0mv4UT7eu_oxXNFxPwAsXvjEi0TnpjY7TgfuZLjSBVgW8EP_zhUC99XkK5OQDFST0MrPVqa2S-4rHhL1N06UuOBkTN4AlluzZNWzX-cNvK2fWh2K-CjnU1QaLGII9VzbqAlR_plGLuyEVplglvRdMw;
PREF=ID=7c6e6b3cd9a5942f:U=9f44cf0a8279d4ac:FF=0:TM=1303788727:LM=1329725620:GM=1:S=jWjIj_kEdiM2B96x; HSID=AUqWe6aXETXwIKOsF; APISID=A3CWxKT-sm9ltGqG/ADSVUh9mFFvh2vAhG; NID=57=e5Q8Xz-stt_quQcEEBoXnYgHQnQy3mm0fSg53PazgSopWb-LamVecmHDrSotyLgzMbgCCtgYkuOp6udRm8ql2XbbggDfBUtIQz5D86wOYLG321Lk262PuDu_AmE2ypMr; PP_TOS_ACK=2

HTTP/1.1 200 OK

Content-Type: text/html; charset=UTF-8

Content-Encoding: gzip
Transfer-Encoding: chunked
Date: Mon, 20 Feb 2012 08:35:40 GMT
Server: gws
Cache-Control: private
X-XSS-Protection: 1; mode=block
x-frame-options: SAMEORIGIN

Transaction 3:

http://www.google.com/images/srpr/logo3w.png

GET /images/srpr/logo3w.png HTTP/1.1
Host: www.google.com
User-Agent: Mozilla/5.0 (iPhone; U; CPU iPhone OS 3_0 like Mac OS X; en-us) AppleWebKit/528.18 (KHTML, like Gecko) Version/4.0 Mobile/7A341 Safari/528.16
Accept: image/png,image/*;q=0.8,*/*;q=0.5
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip, deflate
Connection: keep-alive
Referer: http://www.google.com/
Cookie: rememberme=true;
SID=DQAAALYAAAAOxSu9gLe_6MAJNuIGaUI_yJdQ0QWUWcpQsf0TEistdIDmSJZsy5JFCh7NldGmMHJkFQIHxud0ThLmujz901D1c1UzI7hrD755ZvuA3Cf5U0mv4UT7eu_oxXNFxPwAsXvjEi0TnpjY7TgfuZLjSBVgW8EP_zhUC99XkK5OQDFST0MrPVqa2S-4rHhL1N06UuOBkTN4AlluzZNWzX-cNvK2fWh2K-CjnU1QaLGII9VzbqAlr_plGLuyEVplglvRdMw;
PREF=ID=7c6e6b3cd9a5942f:U=9f44cf0a8279d4ac:FF=0:TM=1303788727:LM=1329725620:GM=1:S=jWjIj_kEdiM2B96x; HSID=AUqWe6aXETXwIKOsF; APISID=A3CWxKT-sm9ltGqG/ADSVUh9mFFvh2vAhG; NID=57=e5Q8Xz-stt_quQcEEBoXnYgHQnQy3mm0fSg53PazgSopWb-LamVecmHDrSotyLgzMbgCCtgYkuOp6udRm8ql2XbbggDfBUtIQz5D86wOYLG321Lk262PuDu_AmE2ypMr; PP_TOS_ACK=2

HTTP/1.1 200 OK
Content-Type: image/png
Last-Modified: Fri, 05 Aug 2011 02:40:26 GMT
Date: Mon, 20 Feb 2012 08:35:40 GMT
Expires: Mon, 20 Feb 2012 08:35:40 GMT
Cache-Control: private, max-age=31536000
X-Content-Type-Options: nosniff
Server: sffe
Content-Length: 7007
X-XSS-Protection: 1; mode=block

Transaction 4:

http://www.google.com/extern_js/f/CgJlbhICdXMrMEU4ACwrMfo4ACwrMA44ACwrMBc4ACwrMDw4ACwrMFE4ACwrMAo4AJoCA21vYiwrMJgBOAAsKzAWOAAAsKzAZOAAAsKzBBOAAsKzBNOAAAsKzB0OAAAsKzBTOAAAsKzBUOAAAsKzBpOAAAsKzBrOAAAsKzB2OAAAsKzB7OAAAsKzCAATgALCswAE4ACwrMIwBOAAsKzCQATgALCswkgE4ACwrMJYBOAAsKzCjATgALCswqAE4ACwrMKwBOAAsKzCzATgALCswvgE4ACwrMMwBOAAsKzDVATgALCsw2AE4ACwrMIYBOAAsKzCRATgALCswpAE4ACwrMBg4ACwrMCY4ACyAAlaQAmU/csMWpFDHhv8.js

GET
/extern_js/f/CgJlbhICdXMrMEU4ACwrMfo4ACwrMA44ACwrMBc4ACwrMDw4ACwrMFE4ACwrMAo4AJoCA21vYiwrMJgBOAAsKzAWOAAAsKzAZOAAAsKzBBOAAsKzBNOAAAsKzB0OAAAsKzBTOAAAsKzBUOAAAsKzBpOAAAsKzBrOAAAsKzB2OAAAsKzB7OAAAsKzCAATgALCswAE4ACwrMIwBOAAs

KzCQATgALCswkgE4ACwrMJYBOAAsKzCjATgALCswqAE4ACwrMKwBOAAsKzCzATgALCswvgE
4ACwrMMwBOAAsKzDVATgALCsw2AE4ACwrMIYBOAAsKzCRATgALCswpAE4ACwrMBg4ACwrMC
Y4ACyAAlaQAmU/csmWpFDHhv8.js HTTP/1.1
Host: www.google.com
User-Agent: Mozilla/5.0 (iPhone; U; CPU iPhone OS 3_0 like Mac OS X;
en-us) AppleWebKit/528.18 (KHTML, like Gecko) Version/4.0 Mobile/7A341
Safari/528.16
Accept: */*
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip, deflate
Connection: keep-alive
Referer: http://www.google.com/
Cookie: rememberme=true;
SID=DQAAALYAAAAOxSu9gLe_6MAJNuIGaUI_yJdQ0QWUWcpQsfOTEistdIDmSJZsy5JFCh7
NldGmMHJkFQIHXudOThLmuJz901DIc1UzI7hrD755ZvuA3Cf5U0mv4UT7eu_oxXNFxPwAsX
vjEi0TnpjY7TgfuZLjSBVgW8EP_zhUC99XkK5OQDFST0MrPVqa2S-
4rHhL1N06UuOBkTN4AlluzZNWzX-cNvK2fWh2K-
CjnU1QaLGII9VzbqAlR_plGLuyEVplglvRdMw;
PREF=ID=7c6e6b3cd9a5942f:U=9f44cf0a8279d4ac:FF=0:TM=1303788727:LM=13297
25620:GM=1:S=jWjIj_kEdiM2B96x; HSID=AUqWe6aXETXwIKoSF; APISID=A3CWXKT-
sm9ltGqG/ADSVUh9mFFvh2vAhG; NID=57=e5Q8Xz-
stt_quQcEEBoXnYgHQnQy3mm0fSg53PazgSopWb-
LamVecmHDrS0tyLgzMbgCCtgYkuOp6udRm8ql2XbbggDfBUtIQz5D86wOYLG32lLk262PuD
u_AmE2ypMr; PP_TOS_ACK=2

HTTP/1.1 200 OK
Content-Type: text/javascript; charset=UTF-8
Expires: Fri, 15 Feb 2013 00:00:00 GMT
Last-Modified: Fri, 18 Feb 2011 00:00:00 GMT
Date: Fri, 17 Feb 2012 21:10:37 GMT
Vary: Accept-Encoding
Content-Disposition: attachment
Content-Encoding: gzip
Server: gws
Content-Length: 84238
X-XSS-Protection: 1; mode=block
x-frame-options: SAMEORIGIN
Cache-Control: public, max-age=31536000
Age: 213903

Transaction 5:

http://www.google.com/mbd?hl=en&output=search&mbtype=56

GET /mbd?hl=en&output=search&mbtype=56 HTTP/1.1
Host: www.google.com
User-Agent: Mozilla/5.0 (iPhone; U; CPU iPhone OS 3_0 like Mac OS X;
en-us) AppleWebKit/528.18 (KHTML, like Gecko) Version/4.0 Mobile/7A341
Safari/528.16
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip, deflate
Connection: keep-alive
Referer: http://www.google.com/
Cookie: rememberme=true;
SID=DQAAALYAAAAOxSu9gLe_6MAJNuIGaUI_yJdQ0QWUWcpQsfOTEistdIDmSJZsy5JFCh7
NldGmMHJkFQIHXudOThLmuJz901DIc1UzI7hrD755ZvuA3Cf5U0mv4UT7eu_oxXNFxPwAsX
vjEi0TnpjY7TgfuZLjSBVgW8EP_zhUC99XkK5OQDFST0MrPVqa2S-
4rHhL1N06UuOBkTN4AlluzZNWzX-cNvK2fWh2K-

CjnU1QaLGII9VzbqAlR_plGLuyEVplglvRdMw;
PREF=ID=7c6e6b3cd9a5942f:U=9f44cf0a8279d4ac:FF=0:TM=1303788727:LM=13297
25620:GM=1:S=jWjIj_kEdiM2B96x; HSID=AUqWe6aXETXwIKOsF; APISID=A3CWXKT-
sm9ltGqG/ADSVUh9mFFvh2vAhG; NID=57=e5Q8Xz-
stt_quQcEEBoXnYgHQnQy3mm0fSg53PazgSopWb-
LamVecmHDrSotyLgzMbgCCtgYkuOp6udRm8ql2XbbggDfBUtIQz5D86wOYLG321Lk262PuD
u_AmE2ypMr; PP_TOS_ACK=2

HTTP/1.1 200 OK
Cache-Control: private, max-age=0
Content-Type: text/html; charset=UTF-8
Date: Mon, 20 Feb 2012 08:35:40 GMT
Expires: -1
Content-Encoding: gzip
Server: gws
Content-Length: 103
X-XSS-Protection: 1; mode=block
x-frame-options: SAMEORIGIN

Transaction 6:

http://clients1.google.com/generate_204

GET /generate_204 HTTP/1.1
Host: clients1.google.com
User-Agent: Mozilla/5.0 (iPhone; U; CPU iPhone OS 3_0 like Mac OS X;
en-us) AppleWebKit/528.18 (KHTML, like Gecko) Version/4.0 Mobile/7A341
Safari/528.16
Accept: image/png,image/*;q=0.8,*/*;q=0.5
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip, deflate
Connection: keep-alive
Referer: http://www.google.com/
Cookie: rememberme=true;
SID=DQAAALYAAAAOxSu9gLe_6MAJNuIGaUI_yJdQ0QWUWcpQsfOTEistdIDmSJZsy5JFCh7
NldGmMHJkFQIHxudOThLmujz901DlclUzI7hrD755ZvuA3Cf5U0mv4UT7eu_oxXNFxPwAsX
vjEi0TnpjY7TgfuZLjSBVgW8EP_zhUC99XkK5OQDFST0MrPVqa2S-
4rHhL1N06UuOBkTN4AlluzZNWzX-cNvK2fWh2K-
CjnU1QaLGII9VzbqAlR_plGLuyEVplglvRdMw;
PREF=ID=7c6e6b3cd9a5942f:U=9f44cf0a8279d4ac:FF=0:TM=1303788727:LM=13297
25620:GM=1:S=jWjIj_kEdiM2B96x; HSID=AUqWe6aXETXwIKOsF; APISID=A3CWXKT-
sm9ltGqG/ADSVUh9mFFvh2vAhG; NID=57=e5Q8Xz-
stt_quQcEEBoXnYgHQnQy3mm0fSg53PazgSopWb-
LamVecmHDrSotyLgzMbgCCtgYkuOp6udRm8ql2XbbggDfBUtIQz5D86wOYLG321Lk262PuD
u_AmE2ypMr; PP_TOS_ACK=2

HTTP/1.1 204 No Content
Content-Length: 0
Content-Type: text/html
Date: Mon, 20 Feb 2012 08:35:40 GMT
Server: GFE/2.0

http://www.gstatic.com/m/images/gray_dot.png

GET /m/images/gray_dot.png HTTP/1.1
Host: www.gstatic.com
User-Agent: Mozilla/5.0 (iPhone; U; CPU iPhone OS 3_0 like Mac OS X;
en-us) AppleWebKit/528.18 (KHTML, like Gecko) Version/4.0 Mobile/7A341
Safari/528.16

Accept: image/png,image/*;q=0.8,*/*;q=0.5
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip, deflate
Connection: keep-alive
Referer: http://www.google.com/

HTTP/1.1 200 OK
Content-Type: image/png
Last-Modified: Wed, 28 Sep 2011 03:00:23 GMT
Date: Fri, 17 Feb 2012 21:05:42 GMT
Expires: Sat, 16 Feb 2013 21:05:42 GMT
X-Content-Type-Options: nosniff
Server: sffe
Content-Length: 473
X-XSS-Protection: 1; mode=block
Cache-Control: public, no-transform, max-age=31536000
Age: 214198

Transaction 7:

http://ssl.gstatic.com/m/og/resources/resources_v16_s2.js

GET /m/og/resources/resources_v16_s2.js HTTP/1.1
Host: ssl.gstatic.com
User-Agent: Mozilla/5.0 (iPhone; U; CPU iPhone OS 3_0 like Mac OS X; en-us) AppleWebKit/528.18 (KHTML, like Gecko) Version/4.0 Mobile/7A341 Safari/528.16
Accept: /*/*
Accept-Language: en-us,en;q=0.5
Accept-Encoding: gzip, deflate
Connection: keep-alive
Referer: http://www.google.com/

HTTP/1.1 200 OK
Vary: Accept-Encoding
Content-Encoding: gzip
Content-Type: text/javascript
Last-Modified: Thu, 02 Feb 2012 18:53:53 GMT
Date: Fri, 17 Feb 2012 21:05:43 GMT
Expires: Sat, 16 Feb 2013 21:05:43 GMT
X-Content-Type-Options: nosniff
Server: sffe
Content-Length: 120277
X-XSS-Protection: 1; mode=block
Cache-Control: public, max-age=31536000
Age: 214198

Each of the following questions is worth 2 points.

[2 pts] What transactions involve a "redirect"?

Answer: **Transactions 1 (Location: header)**

[2 pts] What compression is the browser supporting?

Answer: **gzip, deflate**

[2 pts] What response headers are used to help caching images?

Answer: Last-Modified and Expires

[2 pts] Is any content delivered in compressed form and if yes, in what transactions?

Answer: the JavaScript csMWpFDHhv8.js in Transaction 4, the HTML in Transaction 5, the JavaScript resources_v16_s2.js in Transaction 7

[2 pts] What Document (MIME) types are returned by the servers?

Answer: HTML, IMAGE, JavaScript

[2 pts] How many web servers are involved in these transactions?

Answer: 3: gws, sffe, GFE/2.0

[2 pts] Are all connections "persistent"?

Answer: Yes, "Connection: keep-alive" starting at Transaction 1

[2 pts] Some transactions are returning "301 Moved Permanently". What does that mean?

Answer: The page has been moved, resulting in a "location" redirect.

[2 pts] What character sets are used in these transactions and for what type of content?

Answer: UTF-8. HTML in Transaction 1, 2, 5 and JavaScript in Transaction 4

[2 pts] What MIME type(s) does the browser support?

Answer: text/html, application/xhtml+xml, application/xml, image/png, image/*, text/javascript

PHP QUESTIONS [20 PTS]

For this exercise, you will use a list of five of the largest cities in the world. (Please note, these are not the ten largest, just a selection of five from the largest cities.) Create an array with the following values: Tokyo, Mexico City, New York City, Mumbai, Seoul.

Print these values to the browser separated by commas, using a loop to iterate over the array.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0  
Transitional//EN"  
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-  
transitional.dtd">
```

```
<html xmlns="http://www.w3.org/1999/xhtml"    xml:lang="en"  
lang="en">
```

```

<head>
<meta http-equiv="content-type"
content="text/html; charset=iso-8859-1" />
<title>Simple Array Loop - Cities</title>
</head>

<body>
<h2>Large Cities<br /></h2>

<?php
//Create array.
$cities=array(
    "Tokyo",
    "Mexico City",
    "New York City",
    "Mumbai",
    "Seoul"
);

//Print values of array to browser, separated by commas.
foreach($cities as $c){
    echo "$c, ";
}
?>

</body>
</html>

```

DOM / JAVASCRIPT QUESTIONS [10 PTS]

Consider the following XML file, books.xml:

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<bookstore>
    <book category="cooking">
        <title lang="en">Everyday Italian</title>
        <author>Giada De Laurentiis</author>
        <year>2005</year>
        <price>30.00</price>
    </book>
    <book category="children">
        <title lang="en">Harry Potter</title>
        <author>J K. Rowling</author>
        <year>2005</year>
        <price>29.99</price>
    </book>
    <book category="web">
        <title lang="en">XQuery Kick Start</title>
        <author>James McGovern</author>
    </book>
</bookstore>

```



```

        <author>Per Bothner</author>
        <author>Kurt Cagle</author>
        <author>James Linn</author>
        <author>Vaidyanathan Nagarajan</author>
        <year>2003</year>
        <price>49.99</price>
    </book>
    <book category="web" cover="paperback">
        <title lang="en">Learning XML</title>
        <author>Erik T. Ray</author>
        <year>2003</year>
        <price>39.95</price>
    </book>
</bookstore>

```

Below is an outline for a JavaScript/ program using DOM functions that inputs the xml file books.xml, “clones” the first “book” node, appends it after the last “book” node, and then prints out the resulting “title” nodes as in the following output:

Everyday Italian
 Harry Potter
 XQuery Kick Start
 Learning XML
 Everyday Italian

Your task is to fill in the missing JavaScript code so that the program works correctly.

```

function loadXMLDoc(dname)
{
  try //Internet Explorer
  {
    xmlDoc=new ActiveXObject("Microsoft.XMLDOM");
  }
  catch(e)
  {
    try //Firefox, Mozilla, Opera, etc.
    {
      xmlDoc=document.implementation.createDocument("", "", null);
    }
    catch(e) {alert(e.message)}
  }
  try
  {
    xmlDoc.async=false;
    xmlDoc.load(dname);
    return(xmlDoc);
  }
  catch(e) {alert(e.message)}
  return(null);
}

```

```

<html>
<head>
<script type="text/javascript" src="loadxmldoc.js">
</script>
</head>
<body>

<script type="text/javascript">
xmlDoc=loadXMLDoc("books.xml");

x=xmlDoc.getElementsByTagName('book')[0];
cloneNode=x.cloneNode(true);
xmlDoc.documentElement.appendChild(cloneNode);

//Output all titles
y=xmlDoc.getElementsByTagName("title");
for (i=0;i<y.length;i++)
{
document.write(y[i].childNodes[0].nodeValue);
document.write("<br />");
}

</script>
</body>
</html>

```

CSS QUESTIONS [20 PTS]

Below are lines extracted from the CSS style sheet of bing.com. For each line answer the question. Each question is worth 5 points.

Q1. Give an HTML example usage of the declaration below:

```
.sw_tb li{display:inline;line-height:normal}
```

A1.

```

<div class="sw_tb">
    <ul>
        <li>
        <li>
    </ul>
</div>

```

Q2. What does this declaration do?

```
a,body{color:#fff;text-decoration:none}
```

A2. Changes the color and text-decoration CSS properties for the A (Anchor) and BODY tags

Q3. Give two (2) HTML examples of usage of the declaration below:

```
#hp_sw_hdr, .sw_tb div{display:inline}
```

A3.

```
<div ID="hp_sw_hdr"> </div>
```

```
<table class="sw_tb">
  <div>
    some text
  </div>
</table>
```

Q4. Write in the CSS to create a “class” named hp_sw_logo that changes the CSS propertis background-position to 0, margin_top to -75 pixels and height to 121 pixels.

A4.

```
.hp_sw_logo{background-position:0;margin-top:-75px;height:121px}
```

WEB SERVER [10 PTS]

Below is a replica of an actual httpd.conf file from a real website. Each line has been numbered. Answer the questions immediately after the end of the file.

```
1. #####
2. ### General Settings
3. #####
4. ServerType standalone
5. ServerRoot "/usr/bin/local/apache"
6. PidFile "/var/run/httpd.pid"
7. ScoreBoardFile "/var/log/apache/httpd.scoreboard"
8. Timeout 300
9. KeepAlive Off
10. MaxKeepAliveRequests 100
11. KeepAliveTimeout 15
12. MinSpareServers 10
13. MaxSpareServers 20
14. StartServers 6
15. MaxClients 256
16. MaxRequestsPerChild 0
```

```

17. Port 8088
18. HostnameLookups Off
19. ServerSignature Off
20. ErrorDocument 403 /link_error.php
21. ErrorDocument 404 /link_error.php
22. ErrorDocument 500 /link_error.php
23. User nobody
24. Group nobody
25. ServerAdmin webmaster@mp3xyz.com
26. ServerName SERVER-IP
27. NameVirtualHost SERVER-IP
28. DocumentRoot "/usr/bin/local/apache/htdocs"
29. ServerTokens ProductOnly
30. Include conf/vhosts.conf
31. Include conf/vhosts_ssl.conf
32. #LoadModule sql_log_module      libexec/mod_log_sql.so
33. LoadModule php5_module          libexec/libphp5.so
34. <Directory "/usr/bin/local/apache/htdocs">
35. Options FollowSymLinks
36. AllowOverride None
37.     Order deny,allow
38.     Allow from all
39. </Directory>
40. ScriptAlias /cgi-bin/ "/usr/bin/local/apache/cgi-bin/"
41. <Directory "/usr/bin/local/apache/cgi-bin">
42.     AllowOverride None
43.     Options +ExecCGI
44.     Order allow,deny
45.     Allow from all
46. </Directory>
47. <Files ~ "^\.ht">
48.     Order allow,deny
49.     Deny from all
50.     Satisfy All
51. </Files>
52. DirectoryIndex index.html index.php
53. LogLevel warn
54. LogFormat "%h %l %u %t \"%r\" %>s %b \"%{Referer}i\" \"%{User-Agent}i\" \"%{Cookie}i\"" combined
55. LogFormat "%h %l %u %t \"%r\" %>s %b" common
56. LogFormat "%{Referer}i -> %U" referer
57. LogFormat "%{User-agent}i" agent
58. ErrorLog /var/log/apache/error_log
59. CustomLog /var/log/apache/access_log combined env=!attacks
60. CustomLog /var/log/apache/attack_log combined env=attacks
61. TypesConfig /usr/bin/local/apache/conf/mime.types
62. DefaultType text/plain
63. AddEncoding x-compress Z
64. AddEncoding x-gzip gz tgz
65. AddType application/x-tar .tgz
66. AddType application/x-httpd-php .php
67. AddType application/x-httpd-php-source .phps
68. BrowserMatch "Mozilla/2" nokeepalive
69. BrowserMatch "MSIE 4\.0b2;" nokeepalive downgrade-1.0 force-response-1.0
70. BrowserMatch "RealPlayer 4\.0" force-response-1.0
71. BrowserMatch "Java/1\.0" force-response-1.0

```

```
72. BrowserMatch "JDK/1\0" force-response-1.0
73. <Location /server-status>
74. SetHandler server-status
75. Order Deny,Allow
76. Deny from all
77. Allow from 10.0.0.0/24
78. Allow from 192.168.0.0/16
79. Allow from 172.16.200.0/16
80. </Location>
```

Answer the following questions:

[2 pts] Are persistent connections turned on?

No. KeepAlive is Off

[2 pts] What is the number of simultaneous requests that can be served?

256 (MaxClients)

[2 pts] Which users are denied access to executing CGI scripts?

None: See line 45: "Allow from all"

[2 pts] What is the default MIME type?

text/plain. See line 62: "DefaultType text/plain"

[2 pts] What is the purpose of lines 73 - 80?

Limits access to the server status to machines in the "local area network" (IP addresses starting with 10.0.X.X, 192.168.X.X, and 172.16.X.X), excluding Internet access.

XML QUESTIONS [15 PTS]

There are 15 questions and each question is worth 1 point. Place a checkmark on the correct answer.

1. What does XML stand for?

☐ Example Markup Language

☐ X-Markup Language

☐ eXtra Modern Link

☒ eXtensible Markup Language

2. Each attribute in XML should have:

☒ Name and Value

☐ Style and Form

☐ Letter and Number

3. Is this a "well formed" XML document?

```
<?xml version="1.0"?>
<note>
<to>Tove</to>
<from>Jani</from>
<heading>Reminder</heading>
<body>Don't forget me this weekend!</body>
</note>
```

- ☐ No
☒ Yes

4. Is this a "well formed" XML document?

```
<?xml version="1.0"?>
<to>Tove</to>
<from>Jani</from>
<heading>Reminder</heading>
<body>Don't forget me this weekend!</body>
```

- ☐ Yes
☒ No

5. Which statement is true?

- ☐ XML documents must have a root tag
☐ XML tags are case sensitive
☐ XML elements must be properly nested
☒ All the statements are true

6. XML preserves white spaces

- ☐ False
☒ True

7. Is this a "well formed" XML document?

```
<?xml version="1.0"?>
<note>
<to age="29">Tove</to>
<from>Jani</from>
</note>
```

- ☒ Yes
☐ No

8. Is this a "well formed" XML document?

```
<?xml version="1.0"?>
<note>
<to age=29>Tove</to>
<from>Jani</from>
</note>
```

- ☒ No

- ☐ Yes
- 9.** XML elements cannot be empty
☒ False
☐ True
- 10.** Which is not a correct name for an XML element?
☐ <h1>
☒ <1dollar>
☐ All 3 names are incorrect
☐ <Note>
- 11.** Which is not a correct name for an XML element?
☐ <age>
☐ All 3 names are incorrect
☒ <first name>
☐ <NAME>
- 12.** Which is not a correct name for an XML element?
☐ <7eleven>
☒ All 3 names are incorrect
☐ <xmldocument>
☐ <phone number>
- 13.** XML attribute values must always be enclosed in quotes
☐ False
☒ True
- 14.** For the XML parser to ignore a certain section of your XML document, which syntax is correct?
☐ <PCDATA> Text to be ignored </PCDATA>
☐ <CDATA> Text to be ignored </CDATA>
☐ <xml:CDATA[Text to be ignored]>
☒ <![CDATA[Text to be ignored]]>
- 15.** Which statement is true?
☐ All XML documents must have a DTD
☒ All XML elements must be properly closed
☐ All XML elements must be lower case
☐ All the statements are true

JAVASCRIPT / REGULAR EXPRESSIONS QUESTIONS [15 PTS]

Consider the following program:

```
var re = /\w+\s/g;  
var str = "fee fi fo fum";
```

```
var myArray = str.match(re);  
console.log(myArray);
```

Q1. [5 points] What regular expression is created by the first assignment?

A1. `re = /\w+\s/g` creates a regular expression that looks for one or more characters followed by a space, and it looks for this combination throughout the string.

Q2. [5 points] What output is displayed on the console?

A2. `["fee ", "fi ", "fo "]`

Consider the following program:

```
alert( "123".match( /\d/g ) )
```

Q3. [5 points] What is displayed by the alert?

A3. `'1', '2', '3'`