

Computer Science 571 Exam #1
Prof. Papa
Thursday, February 23, 2017, 6:00pm – 7:20pm

Name:

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]

Below is part of an exchange of messages between the browser and www.google.com, obtained by running Live HTTP Headers. Answer the questions that follow. Each question is worth 2 points. NOTICE: NO PARTIAL CREDIT on any of the questions.

[1] <https://www.google.com/>

GET / HTTP/1.1

Host: www.google.com

User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:26.0) Gecko/20100101 Firefox/26.0

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

Cookie:

PREF=ID=6071bfff31af7b094:U=5b697a0afdbaf161:LD=en:TM=1364436987:LM=1391892814:GM=1:SG=

1:S=12CgY0xgm1OBnDi_;

NID=67=PRYGZwG3OrF_o6Whn6lBehspMzOutVAvVOJKq0Ziks5X5VtP4Uc2I9PJ-

QtENjxADGTyHWHpyivxKLU1blICu2iSLJ-31-NJc5QpFRvc-A7l3Da6l37tUs3-

p4RTG3Yht4kzrkqxVKFSWJBDCrod97U5FqM3DC_MUU5RySdIYwsIm5vzB5kbrvJ01Bnw9W-B7nPKrTToc2_C7SK08N3PjtSI-QFH8Y-FieJ6SFUkUge4;

SID=DQAAAMUAAAB1XWv1F7NFO8orDc0Q0bul4Lp8OhozF1djzSBVuLgYHgt1IhMZrSPaDzADJ8caQMD0_YWSh

eGmVdQkzBAYlRDcVZHT8QDtrMiIOiSktkZ_FL60a47C_Jk5YfOF6KBhBZoSKXOSibfEdPjiCbZStTQEtLVdjar

s9Pfd6o79ABT0AGHWkTAMWyPf9DcYyWCs4nClGFbBXUgdU_h0OxDrJeMEuxlnL51fRK90jeQ3GQS8on9Mm4Tby

qsxGgJgdwur4DPHrarks8sonf16DRnrcV-; HSID=AGA2i2PO9edxpHm2N;

SSID=AdpAV2WHoO09IIXwB;

APISID=D-Yuaw6HFJxkMeac/Alotmp7Xh0t8tyq8D;

SAPISID=LKdAgPQoxwUrndVl/Aljt9hu7WxrSir7Ve

Connection: keep-alive

HTTP/1.1 200 OK

Alternate-Protocol: 443:quic
Cache-Control: private, max-age=0
Content-Encoding: gzip
Content-Type: text/html; charset=UTF-8
Date: Sat, 08 Feb 2014 20:55:28 GMT
Expires: -1
Server: gws
Set-Cookie:
PREF=ID=6071bfff31af7b094:U=5b697a0afdbaf161:FF=0:LD=en:TM=1364436987:LM
=1391892928:GM=
1:SG=1:S=Hzjj9NnFuvy09qII; expires=Mon, 08-Feb-2016 20:55:28 GMT;
path=/
domain=.google.com
X-Frame-Options: SAMEORIGIN

[2] https://www.google.com/gen_204?

GET

/gen_204?v=3&s=webhp&action=&e=31215,4000116,4007661,4007830,4008067,4008133,4008142,4009016,4009033,4009352,4009565,4009641,4010806,4010858,4010899,4011109,4011228,4011258,4011550,4011552,4011556,4011558,4011559,4011679,4011863,4011959,4011996,4012001,4012316,4012318,4012320,4012512,4012538,4012869,4012896,4012897,4013099,4013100,4013338,4013374,4013414,4013416,4013436,4013499,4013591,4013609,4013723,4013823,4013842,4013868,4013881,4013918,4013979,4014085,4014091,4014092,4014115,4014273,4014431,4014513,4014515,4014518,4014565,4014572,4014573,4014597,4014632,4014636,4014649,4014685,4014718,4014750,4014794,4014822,4014825,4014865,4014989,4015027,4015133,4015199,4015222,8300007,8500073,8500153,8500156,10200002,10200012,10200029,10200030,10200040,10200066&ei=wJn2UqH3H4PyoAS0yoH4Cw&imc=3&imn=3&imp=0&atyp=csi&adh=&xjs=init.30.39.sb.18.p.2.foot.2.cr.1.r.1&rt=xjsls.18,prt.18,xjses.86,xjsee.129,xjs.133,ol.209,iml.18,wsrt.349,cst.0,dnst.0,rqst.232,rspt.5 HTTP/1.1
Host: www.google.com
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:26.0) Gecko/20100101 Firefox/26.0
Accept: image/png,image/*;q=0.8,*/*;q=0.5
Accept-Language: en-US,en;q=0.5

Accept-Encoding: gzip, deflate
Referer: https://www.google.com/
Cookie:
PREF=ID=6071bfff31af7b094:U=5b697a0afdbaf161:FF=0:LD=en:TM=1364436987:LM=1391892928:GM=
1:SG=1:S=Hzjj9NnFuvy09qII;
NID=67=PRYGZwG3OrF_o6Whn6lBehspMzOutVAvVOJKq0Ziks5X5VtP4Uc2I9PJ-QtENjxADGTYHWHpyivxKLU1blICu2iSLJ-31-NJc5QpFRvc-A7l3Da6l37tUs3-p4RTG3Yht4kzrkqxVKFSWJBDcrod97U5FqM3DC_MUU5RySdIYwsIm5vzB5kbrvJ01Bnw9W-B7nPKrTToc2_C7SK08N3PjtSI-QFH8Y-FieJ6SFUkUge4;
SID=DQAAAMUAAAB1XWvlF7NFO8orDc0Q0bul4Lp8OhozF1djzsBVuLgYHgtlIhMZrSPaDzADJ8caOQMD0_YWSh
eGmVdQkzBAYlRDcVZHT8QDtrMiIOiSktkZ_FL60a47C_Jk5YfOF6KBhBZoSKXOSibfEdPjiCbZStTQEtLVdjar
s9PfD6o79ABT0AGHWkTAMWyPf9DcYyWCs4nClGFbBXUgdU_h0OxDrJeMEuxlnL51fRK90jeQ3GQS8on9Mm4Tby
qsxGgJgdwur4DPHrarkS8sonf16DRnrcV-; HSID=AGA2i2PO9edxpHm2N;
SSID=AdpAV2WHoO09IIXwB;
APISID=D-Yuaw6HFJxkMeac/Alotmp7Xh0t8tyq8D;
SAPISID=LKdAgPQoxwUrndVl/AljT9hu7WxrSir7Ve
Connection: keep-alive

HTTP/1.1 204 No Content

Alternate-Protocol: 443:quic
Content-Length: 0
Content-Type: text/html; charset=UTF-8
Date: Sat, 08 Feb 2014 20:55:28 GMT
Server: gws
Set-Cookie:
PREF=ID=6071bfff31af7b094:U=5b697a0afdbaf161:FF=0:LD=en:TM=1364436987:LM=1391892928:GM=
1:SG=1:S=Hzjj9NnFuvy09qII; expires=Mon, 08-Feb-2016 20:55:28 GMT;
path=/
domain=.google.com
X-Frame-Options: SAMEORIGIN

[3] https://plus.google.com/u/0/_/n/gcosuc

POST /u/0/_/n/gcosuc HTTP/1.1

Host: plus.google.com
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:26.0) Gecko/20100101 Firefox/26.0
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
Content-Type: application/x-www-form-urlencoded; charset=utf-8

Referer: https://www.google.com/
Content-Length: 109
Origin: https://www.google.com
Cookie:
PREF=ID=6071bfff31af7b094:U=5b697a0afdbaf161:FF=0:LD=en:TM=1364436987:LM=1391892928:GM=1:SG=1:S=Hzjj9NnFuvy09qII;
NID=67=PRYGZwG3OrF_o6Whn6lBehspMzOutVAvVOJKq0Ziks5X5VtP4Uc2I9PJ-QtENjxADGTYHWHpyivxKLU1blICu2iSLJ-31-NJc5QpFRvc-A7l3Da6137tUs3-p4RTG3Yht4kzrkqxVKFSWJBDCrod97U5FqM3DC_MUU5RySdIYwsIm5vzB5kbrvJ01Bnw9W-B7nPKrTToc2_C7SK08N3PjtSI-QFH8Y-FieJ6SFUkUge4;
SID=DQAAAMUAAAB1XWvlf7NFO8orDc0Q0bul4Lp8OhozF1djzSBVuLgYHgtlIhMZrSPaDzADJ8caOQMD0_YWSh
eGmVdQkzBAYlRdCvZHT8QDtrMiIOiSktkZ_FL60a47C_Jk5YfOF6KBhBZoSKXOSibfEdPji
CbZStTQEtLVdjar
s9PfD6o79ABT0AGHWkTAMWyPf9DcYyWCs4nClGFbBXUgdU_h0OxDrJeMEuxlnL51fRK90je
Q3GQS8on9Mm4Tby
qsxGgJgdwur4DPHrarksS8sonf16DRnrcV-; HSID=AGA2i2PO9edxpHm2N;
SSID=AdpAV2WHoO09IIXwB;
APISID=D-Yuaw6HFJxkMeac/Alotmp7Xh0t8tyq8D;
SAPISID=LKdAgPQoxwUrndVl/Aljt9hu7WxrSIR7Ve;
OTZ=2159788_88_88_104280_84_446940
Connection: keep-alive
Pragma: no-cache
Cache-Control: no-cache
ntok=APfa0bqYOnKQRBOfWlHl6L6lyG1MfVeUEl3G2Un_p8sxUzUU4gxcPmU7g0vP7LTmJt
BAIcVYoCNKJG11_
x7QxETGf3-zi_t1Cw%3D%3D

HTTP/1.1 200 OK

access-control-allow-credentials: true
access-control-allow-origin: https://www.google.com
Alternate-Protocol: 443:quic
Cache-Control: no-cache, no-store, max-age=0, must-revalidate
Content-Disposition: attachment; filename="json.txt"; filename*=UTF-8''json.txt
Content-Encoding: gzip
Content-Type: application/json; charset=utf-8
Date: Sat, 08 Feb 2014 20:55:29 GMT
Expires: Fri, 01 Jan 1990 00:00:00 GMT
Pragma: no-cache
Server: GSE
X-Frame-Options: SAMEORIGIN

[4]

https://plus.google.com/u/0/_/notifications/frame?sourceid=1&hl=en&orig

in=https%3A%2F%
2Fwww.google.com&jsh=m%3B%2F_%2Fscs%2Fabc-
static%2F_%2Fjs%2Fk%3Dgapi.gapi.en.BjPelxWx9Rw.O%2Fm%3D__features__%2Fr
t%3Dj%2Fd%3D1%2
Frs%3DAItRSTMdKBwySIqw0iL_wtXL-
PuVX_sSCQ#pid=1&rpctoken=undefined&_methods=onError%2ConInfo%2ChideNoti
ficationWidget%
2CpostSharedMessage%2Ccreauth%2CsetNotificationWidgetHeight%2CsetNotific
ationWidgetSize
%2CswitchTo%2CnavigateTo%2CsetNotificationText%2CsetNotificationAnimati
on%2CgetNotific
ationText%2C_ready%2C_close%2C_open%2C_resizeMe%2C_renderstart&id=I1_13
91892938641&par
ent=https%3A%2F%2Fwww.google.com&pfname=

GET

/u/0/_/notifications/frame?sourceid=1&hl=en&origin=https%3A%2F%2Fwww.go
ogle.com&jsh=m%
3B%2F_%2Fscs%2Fabc-
static%2F_%2Fjs%2Fk%3Dgapi.gapi.en.BjPelxWx9Rw.O%2Fm%3D__features__%2Fr
t%3Dj%2Fd%3D1%2
Frs%3DAItRSTMdKBwySIqw0iL_wtXL-PuVX_sSCQ HTTP/1.1
Host: plus.google.com
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:26.0) Gecko/20100101
Firefox/26.0
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
Referer: https://www.google.com/
Cookie:
PREF=ID=6071bfff31af7b094:U=5b697a0afdbaf161:FF=0:LD=en:TM=1364436987:LM
=1391892928:GM=
1:SG=1:S=Hzjj9NnFuvy09qII;
NID=67=PRYGZwG3OrF_o6Whn6lBehspMzOutVAvVOJKq0Ziks5X5VtP4Uc2I9PJ-
QtENjxADGTYHWHpyivxKLU1blICu2iSLJ-31-NJc5QpFRvc-A7l3Da6137tUs3-
p4RTG3Yht4kzrkqxVKFSWJBDCrod97U5FqM3DC_MUU5RySdIYwsIm5vzB5kbrvJ01Bnw9W-
B7nPKrTToc2_C7SK08N3PjtSI-QFH8Y-FieJ6SFUkUge4;
SID=DQAAAMUAAAB1XWv1F7NFO8orDc0Q0bul4Lp8OhozF1djzsbVuLgYHgt1IhMZrSPaDzA
DJ8caOQMD0_YWSh
eGmVdQkzBAYlRdCvZHT8QDtrMiIOiSktkZ_FL60a47C_Jk5YfOF6KBhBZoSKXOSibfEdPji
CbZStTQEtLVdjar
s9PfD6o79ABT0AGHWkTAMWyPf9DcYyWCs4nClGFbBXUgdU_h0OxDrJeMEuxlnL51fRK90je
Q3GQS8on9Mm4Tby
qsxGgJgdwur4DPHrarkS8sonf16DRnrcV-; HSID=AGA2i2PO9edxpHm2N;
SSID=AdpAV2WHO009IIXwB;
APISID=D-Yuaw6HFJxkMeac/Alotmp7Xh0t8tyq8D;

SAPISID=LKdAgPQoxwUrndVl/A1jT9hu7WxrS1r7Ve;
OTZ=2159788_88_88_104280_84_446940
Connection: keep-alive

HTTP/1.1 200 OK

Alternate-Protocol: 443:quic
Cache-Control: private, max-age=0
Content-Encoding: gzip
Content-Type: text/html; charset=utf-8
Date: Sat, 08 Feb 2014 20:55:29 GMT
Expires: Sat, 08 Feb 2014 20:55:29 GMT
Server: GSE
x-content-type-options: nosniff

[5] http://127.0.0.1:49203/test.txt?_=1391892942342

GET /test.txt?_=1391892942342 HTTP/1.1

Host: 127.0.0.1:49203
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:26.0) Gecko/20100101
Firefox/26.0
Accept: text/plain, */*
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate
X-Requested-With: XMLHttpRequest
Connection: keep-alive

HTTP/1.1 200 OK

Content-Type: text/plain
Date: Sat, 08 Feb 2014 20:55:42 GMT
Last-Modified: Tue, 02 Oct 2012 14:08:14 GMT

Q1. What browser, name and version, participated in the exchange of HTTP data?

Q2. List the names of all web servers involved in these transactions?

Q3. How many transactions between client and server occur?

Q4. What is the name of the web server that returns the Google home page HTML?

Q5. How many bytes of data are transmitted in the POST request?

Q6. List all transactions that are “compressed”.

Q7. How many redirects are executed in the above transactions?

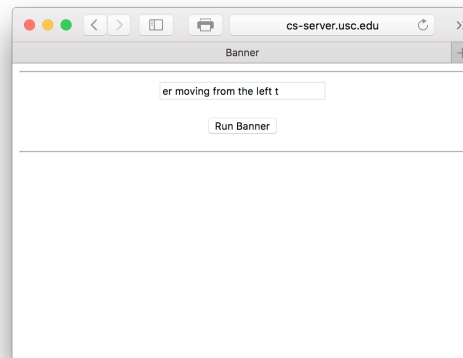
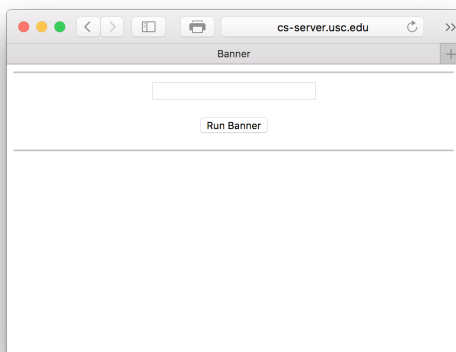
Q8. List three (3) headers used to improve browser cache performance?

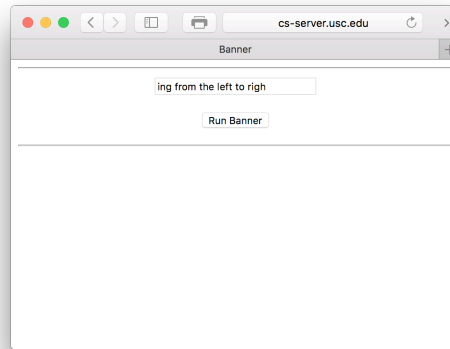
Q9. What types of compression are supported by the Firefox browser used in these transactions?

Q10. What type of content is transferred in transaction 2?

JAVASCRIPT QUESTIONS [20 pts]

Below are three screenshots, taken one after another, of a web page followed by the JavaScript code that implements the page. Some of the code is missing. Fill in the missing code. Each answer is worth 2 points.





```

<HTML>
<HEAD><TITLE> Banner</TITLE>

<SCRIPT LANGUAGE= "javascript">
var sent = "This is a demonstration of a banner moving from the left to
right.";
var slen = sent.length;
var siz = 25;
var a = -3, b = 0;
var subsent = "x";

function makeSub(a,b) {
  subsent = sent.substring(a,b) ;
  return subsent;
}

function newMake() {
  if (a >= slen) {
    a = -3;
    b = 0;
  }
  a = a + 3;
  b = a + siz;
  makeSub(a,b);
  return subsent;
}

function doIt() {
  for (var xxxxxxxxxxxx1) {

```

1.

```

setTimeout("document. xxxxxxxxxxxx2 = xxxxxxxxxxxx3 ()", i*300);

```

2.

3.

```

setTimeout("window.status = xxxxxxxxxxxx4 ()", i*300);

```

4.


```

}
}

</SCRIPT></HEAD>
<BODY >
<HR> <CENTER>
<FORM NAME="z">
<INPUT NAME="textdisplay" TYPE="text" SIZE=25> <P>
<INPUT NAME="doit" Type="button" value = "Run Banner" onClick = "
XXXXXXXXXX5 () ">

```

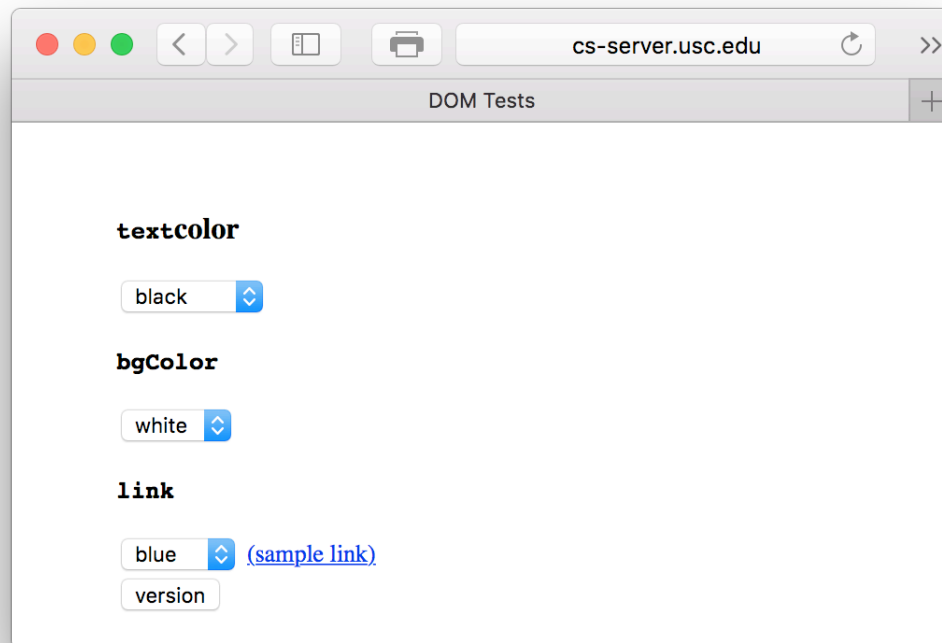
5.

```

</FORM></CENTER>
<HR>
</BODY></HTML>

```

Below is a web page and beneath that is the HTML and JavaScript that generates the page. Some of the code is missing. Fill in the missing code.



```

1.<html>
2.  <head>
3.    <title>DOM Tests</title>
4.    <script type="application/javascript">
5.      function setBodyAttr(attr,value){
6.        if (document.body) eval('document.body.'+attr+'="'+value+'"');
7.        else alert('browser does not support the functionality of
changing color');
8.      }

```

```

9.     </script>
10.  </head>
11.  <body>
12.      <div style="margin: .5in; height: 400;">
13.          <p><b><tt>text</tt>color</b></p>
14.          <form>
15.              <select xxxxxxxxxx6 ('text',

```

6.

```

16.          this.options[this. xxxxxxxxxx7];">

```

7.

```

17.              <option value="black">black
18.              <option value="darkblue">darkblue
19.          </select>
20.          <p><b><tt>bgColor</tt></b></p>
21.          <select xxxxxxxxxx8 ('bgColor',

```

8.

```

22.          this.options[this.selectedIndex].value);">
23.              <option value="white">white
24.              <option value="lightgrey">gray
25.          </select>
26.          <p><b><tt>link</tt></b></p>
27.          <select xxxxxxxxxx9 ('link',

```

9.

```

28.          this.options[this.selectedIndex].value);">
29.              <option value="blue">blue
30.              <option value="green">green
31.          </select>  <small>
32.          <a href="http://www.brownhen.com/dom_api_top.html"
id="sample">
33.              (sample link)</a></small><br>
34.          </form>
35.          <form>
36.              <input type="button" value="version" onclick="alert('version
1')" />
37.          </form>
38.      </div>
39.  </body>
40.</html>

```

Q10. When the user selects the ‘blue option for ‘link’ what line is executed?

PHP QUESTIONS [15 PTS]

Below are two screenshots of a web page, an initial screenshot, then after some fields have been filled in. A third screenshot shows the output after the submit button is clicked. Below is the PHP code that was used. Fifteen lines have some missing code. Each line is worth one point. Provide the missing code.

First Name:

Last Name:

Gender:

Male: ☐

Female: ☐

Please choose your favourite foods:

Steak: ☐

Pizza: ☐

Chicken: ☐

Enter your favorite quote!

Select a Level of Education:

Jr.High ▼

Select your favourite time of day:

Morning ▲
Day
Night ▼

submit

First Name: Sam

Last Name: Pade

Gender:

Male: ☒

Female: ☐

Please choose your favourite foods:

Steak: ☒

Pizza: ☒

Chicken: ☒

to be or not to be,
that is the question

Select a Level of Education:

College ▼

Select your favourite time of day:

Morning ▲
Day
Night ▼

submit

Hello, Sam Pade.
You are Male, and you like Steak
Pizza
Chicken
to be or not to be, this is the question
Your favorite time is Morning, and you passed College!

```
<?php
// if page is not submitted to itself echo the form
if (!isset xxxxxxxxxxxx1)) {
```

```
?>
<html>
<head>
<title>Personal INFO</title>
</head>
```

```

<body style='background-color: #8FD8D8'>
<!--The form is submitted to itself-->
<form method="post" action="<?php echo $_SERVER[xxxxxxxxxx2];?>">



---


    First Name:<input type="text" size="12" maxlength="12" name="Fname"><br />

    Last Name:<input type="text" size="12" maxlength="36" name="Lname"><br />

    Gender:<br />
    Male:<input type="radio" value="Male" name="gender"><br />
    Female:<input type="radio" value="Female" name="gender"><br />

    Please choose your favourite foods:<br />
    Steak:<input type="checkbox" value="Steak" name="food[]"><br />
    Pizza:<input type="checkbox" value="Pizza" name="food[]"><br />
    Chicken:<input type="checkbox" value="Chicken" name="food[]"><br />

    <textarea rows="5" cols="20" name="quote" wrap="physical">
    Enter your favorite quote!</textarea><br />

    Select a Level of Education:<br />
    <select name="education">
    <option value="Jr.High">Jr.High</option>
    <option value="HighSchool">HighSchool</option>
    <option value="College">College</option></select><br />

    Select your favourite time of day:<br />
    <select name="TofD" size="3">
    <option value="Morning">Morning</option>
    <option value="Day">Day</option>
    <option value="Night">Night</option></select><br />

    <input type="submit" value="submit" name="submit">

</form>
<?php
}
else
{
    //Extract information of the submitted form fields
    $Fname = xxxxxxxxxxxx4; _____
    $Lname = xxxxxxxxxxxx4; _____
    $gender = xxxxxxxxxxxx5; _____
    $food = xxxxxxxxxxxx6; _____
    $quote = xxxxxxxxxxxx7; _____
    $education = xxxxxxxxxxxx8; _____
}

```

```

$TofD = xxxxxxxxxxx9; _____

echo "<body style='background-color: #8FD8D8'>";
echo xxxxxxxxxxx10;

echo xxxxxxxxxxx11; _____

//print the list of selected foods
foreach (xxxxxxxxxxx12 as xxxxxxxxxxx12) {
    echo xxxxxxxxxxx3;
}
echo xxxxxxxxxxx14;
echo xxxxxxxxxxx15;

echo "</body>";
}
?>

```

JAVASCRIPT REGULAR EXPRESSIONS QUESTIONS [5 PTS]

The regular expression below includes three sets of parentheses (...). Explain in one sentence the pattern contained in each of the parentheses.

```
var pattern = "^(w+)([a-zA-Z_]+)\\.([a-zA-Z]{2,3})$";
```

Q1. [1 pts] What is the purpose of the pattern within the first set of parentheses?

(w+)

Q2. [1 pts] What is the purpose of the pattern within the second set of parentheses?

([a-zA-Z_]+)

Q3. [1 pts] What is the purpose of the pattern within the third set of parentheses?

([a-zA-Z]{2,3})

Q4. [1 pts] What is the purpose of the ^ and the \$?

JavaScript 1.5 introduced a new notation for Regular Expressions using the ?= notation. Please explain the meaning the following regular expression:

Q5. ?=.*\d

CSS QUESTIONS [20 PTS]

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

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

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

A1.

Q2. What does this declaration do?

```
a,body{color:#f00;text-decoration:none}
```

A2.

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

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

A3.

Q4. Write in the CSS to create a “class” named `hp_my_logo` that changes the CSS properties of background-position to 10 pixels, the margin-top to -75 pixels and the height to 121 pixels.

A4.

Q5. Give three (3) HTML examples of usage of the declaration below:

```
#cbsCarousel, .carouselNav, p {  
    color:#fff;  
    text-decoration:none;  
}
```

A5.

LYNDA.COM QUESTIONS [20 PTS]

For each of the following questions, you will need to complete the answer provided. Each question is worth 2 points.

A. What is the box model?

Q1. The box model is the term used to describe the _____ of all HTML elements.

Q2. Every single element on your web page is considered to be in a _____.

Q3. The 4 properties of this box, _____ define not only the size of the element, but also the how it relates to the elements around it.

B. What is an XML Schema?

Q3. An alternative way of _____ on your XML data.

Q4. An alternative to using_____.

Q5. An XML schema allows you to constrain the document _____.

Q6. In XML Schemas you can also do things like derive your own _____.

C. What is an Array?

Q7. An array is a single _____.

Q8. To tell JavaScript this is an array, there are a few ways to do it, but the easiest one is this:

var multipleValues = _____

Q9. Arrays in JavaScript use what's called a _____ index.

Q10. Because arrays are objects they have _____.