

# Lab Assignments:

## HTML:

**Problem statement-1 :** Create your resume page as per the format shown in the figure on LHS.

### Resume

**Abc Pqr**

Unit 55, SDF II,  
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Mumbai-400 096.  
Mobile No: 9898989898  
**Email:**abc@patni.com

#### **Educational Qualifications:**

Qualification	Institute	University/Board	Marks(%)	Year of Passing
BE (CS)	VJTI	Mumbai University	89%	2003
HSC	Cambridge	ICSE	97%	1999
SSC	Cambridge	ICSE	98%	1997

#### **Skill Set :**

**Operating System:** Windows 9'x,Dos  
**Language:** C/C++  
**Front End:** VB 6.0  
**DBMS:** Oracle 9i

**Problem statement-2 :** Create a web page to display a list as shown in the figure on RHS:

1. Language
  - i. English
    - A. Prose
    - B. Poetry
  - ii. Hindi
    - A. Prose
    - B. Poetry
  - iii. Marathi
    - A. Prose
    - B. Poetry
2. Social Study
  - i. History
  - ii. Geography
3. Science
  - i. Physics
    - A. Part1
    - B. Part2
  - ii. Chemistry
    - A. Organic
    - B. Inorganic
  - iii. Biology
    - A. Botany
    - B. Zoology
4. Maths
  - i. Algebra
  - ii. Geometry

**Problem statement-3-a :** Create a web page to display tables as shown in the figures below. Clicking on link should lead the user to another document that displays a brief description of the book and review comments.

# List of Java Books

Book Title	Author	Book Price
<a href="#">Core Java</a>	Cay Horstman	400
<a href="#">Beginning Java</a>	Ivar Horton	600
<a href="#">Learning Java</a>	Kishori Shahane	400
<a href="#">Java Cookbook</a>	John Keller	800

Problem statement-3-b : **Apply CSS wherever relevant.**



# Hamilton Conference Center

Home Page   Reservations   Facilities   Virtual Tour   Staff   Calendar of Events   Contact Info   Directions   FAQ

Reservations for Conference Rooms  
Tuesday, April 11

Room	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30
Sunrise Room	Marriage Encounter								Marriage Encounter Luncheon		Marriage Encounter Talks							
Mountain View Room	Breakfast Club of Ohio				Ohio Conference of Librarians				Ohio Book Resale Setup									
Arbor Hall	Computer Expo Set Up								Computer Expo Opening Session									
Mitchell Theater	Youth Theatre																	
Gold Room	The Tompkins Group				Pearson Planning				Mothers of Multiples				Teen Connection					
Blue Room	Retirement Planning				The Senior Group				Senior Luncheon		Senior Classes				Tutoring			
Green Room	Drivers' Ed				Movie Club								Tutoring					

To reserve a room, please contact Yancy Inwe at extension 388 or by e-mail at [yancyinwe@hconfcenter.org](mailto:yancyinwe@hconfcenter.org). Reservations should be made at least 48 hours in advance. Cancellations require 24 hour notice. Room deposits will not be returned for cancellations within 24 hours of the scheduled event.

Sunrise Room      Maximum Capacity: 80

Mountain View Room      Maximum Capacity: 150

Arbor Hall      Maximum Capacity: 190

Mitchell Theatre      Maximum Capacity: 120

Gold Room      Maximum Capacity: 40

Blue Room      Maximum Capacity: 30

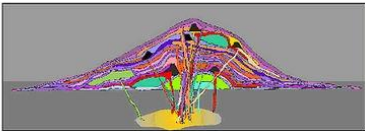
Green Room      Maximum Capacity: 55

HAMILTON CONFERENCE CENTER • 8711 WEST PARK LANE • HAMILTON, OH 45011 • (513) 555 - 7911

Problem statement-4 :Create a Web page on any particular topic. Be sure to bring images in like the sample web page below.


## Stratovolcanoes

Strato Volcanoes comprise the largest percentage (~60%) of the Earth's individual volcanoes and most are characterized by eruptions of *andesite* and *dacite* - lavas that are cooler and more viscous than *basalt*. These more viscous lavas allow gas pressures to build up to high levels (they are effective "plugs" in the plumbing), therefore these volcanoes often suffer explosive eruptions.



Left: This is a schematic diagram of a strato volcano, intended to illustrate the different layers of different materials that comprise them. The purple colors are meant to represent *ash* layers, either the products of fall-out from big eruption clouds or the products of pyroclastic flows. Notice that these ash layers tend to be thin but widespread. The orange colors represent lava flows, and note that some of them have cinder cones associated with them at the *vent*. The green colors are meant to represent lava domes, and notice that they do not flow very far. Each eruption, regardless of what it produces, is fed from the *magma chamber* by a *dike*. Most dikes come up through the center of the volcano and therefore most eruptions occur from a or near the summit. However, some dikes head off sideways to feed eruptions on the flanks.

Right: This is a pit that has been dug into the ground at Cotopaxi, a big strato volcano near Quito, the capital city of Ecuador. The pit is about 2 meters deep and in it you can clearly see a number of ash layers exposed. It is also easy to see that the layers are different - some are coarse and others are fine, some are dark-colored and others are light-colored



The lava at strato volcanoes occasionally forms *aa*, but more commonly it barely flows at all, preferring to pile up in the vent to form volcanic domes. Some strato volcanoes are just a collection of domes piled up on each other. Strato volcanoes are commonly found along subduction-related volcanic arcs, and the *magma* supply rates to strato volcanoes are lower. This is the cause of the cooler and differentiated magma compositions and the reason for the usually long *repose* periods between eruptions. Examples of strato volcanoes include Mt. St. Helens, Mt. Rainier, Pinatubo, Mt. Fuji, Merapi, Galeras, Cotopaxi, and super plenty others.

Problem statement-5: Create a web page to display a table as shown in the figure below. **Apply CSS wherever relevant.**

Name	<input type="text"/>
Employee Code	<input type="text"/>
Department	<input type="radio"/> ADMIN <input type="radio"/> HR <input type="radio"/> TECHNICAL <input type="radio"/> ACCOUNTS
Date of Joining	<input type="text"/> / <input type="text"/> / <input type="text"/> dd mm yyyy
Address	<input type="text"/>
Training programs Attended	<input type="checkbox"/> HTML/DHTML <input type="checkbox"/> JAVA <input type="checkbox"/> CLIENT/SERVER <input type="checkbox"/> .NET
Training Programmes need to attend	JAVASCRIPT JSTRUTS
Send the information at	<a href="mailto:empinfo@patni.com">empinfo@patni.com</a>

#### Problem statement-6 :

### Internet Usage Survey

This survey is being conducted to help identify the Internet usage patterns of our customers.  
Please take a few moments to complete and submit this short form. Thank you for your cooperation.

What type of Internet connection do you have?  
(Select One)

Dial-up  
DSL  
High Speed Cable  
Other

What type of computer do you use most at home?

☐ Desktop
☐ Laptop

How would you describe your main reason for using the Internet?

☐ To do work-related activities  
☐ To do school-related activities  
☐ For entertainment purposes  
☐ Other activities

Types of sites visited

What types of web sites do you access most often?  
Check all that apply.

☐ Self Improvement  
☐ Entertainment  
☐ News and Sports  
☐ Reference  
☐ Email

Time spent using Internet

During an average week, how long do you spend online?

☐ 0-3 Hours  
☐ 4-6 Hours  
☐ 7-10 Hours  
☐ 11-14 Hours  
☐ 15+ Hours

Please comment on your opinions concerning Internet privacy and safety:

First Name:

Last Name:

Age:

Zip Code:

#### Problem statement 7 : Create web page to display table as shown in the figure below.

January						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

**Problem statement 8:** Create an online form to gather feedback from the users on problems or difficulties they have faced while purchasing items in a sports website. The information of the client will be sent via email to an email address pre-established in the source code of the online form.

The webpage will be as follows:

- A. The heading will display the name of the members of the group
- B. The body section will have:
  - An introductory sentence, above the form, informing the end user about the aim to the online form and the instructions to fill in out
  - The web form has following inputs:
    - i. Type of problem: technical (e.g. website is down), product do not available, missing information about the product
    - ii. Username (mandatory)
    - iii. Email (mandatory)
    - iv. Location (mandatory)
    - v. Phone (optional)
    - vi. Description of the problem (mandatory)
    - vii. Notification of problem solved (optional)

The mandatory field will have a red asterisk next to the text label. Provide a submit button.

**Problem statement 9:** Create web page to display frames as shown in the figure below.

CDAC HTML Assignments																									
<b>Assignments</b> <a href="#">Assignment-1</a> <a href="#">Assignment-2</a> <a href="#">Assignment-3</a> <a href="#">Assignment-4</a> <a href="#">Assignment-5</a> <a href="#">Assignment-6</a>	<div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 10px;"><b>Employee Details</b></div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; padding: 2px;">1)</td> <td style="width: 40%; padding: 2px;">Employee Id:</td> <td style="width: 55%; padding: 2px;"><input style="width: 95%;" type="text"/></td> </tr> <tr> <td style="padding: 2px;">2)</td> <td style="padding: 2px;">Employee Name:</td> <td style="padding: 2px;"><input style="width: 95%;" type="text"/></td> </tr> <tr> <td style="padding: 2px;">3)</td> <td style="padding: 2px;">Department Name:</td> <td style="padding: 2px;">S/W <span style="font-size: small;">▼</span></td> </tr> <tr> <td style="padding: 2px;">4)</td> <td style="padding: 2px;">Gender:</td> <td style="padding: 2px;"><input checked="" type="radio"/> Male <input type="radio"/> Female</td> </tr> <tr> <td style="padding: 2px;">5)</td> <td style="padding: 2px;">Address:</td> <td style="padding: 2px;"><div style="border: 1px solid black; height: 40px; width: 95%;"></div></td> </tr> <tr> <td style="padding: 2px;">6)</td> <td style="padding: 2px;">Skill Topic</td> <td style="padding: 2px;"> <input type="checkbox"/> C    <input type="checkbox"/> C++    <input type="checkbox"/> Java  <input type="checkbox"/> .NET         </td> </tr> <tr> <td style="padding: 2px;">7)</td> <td style="padding: 2px;">E-mail:</td> <td style="padding: 2px;"><input style="width: 95%;" type="text"/></td> </tr> <tr> <td style="padding: 2px;">8)</td> <td style="padding: 2px;">Birth Date:</td> <td style="padding: 2px;"> <div style="display: flex; align-items: center;"> <span style="margin-right: 5px;">(MM)/</span> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center;"> <span style="margin-right: 5px;">(DD)/</span> <div style="border: 1px solid black; width: 40px; height: 20px;"></div> </div> </div> </td> </tr> </table>	1)	Employee Id:	<input style="width: 95%;" type="text"/>	2)	Employee Name:	<input style="width: 95%;" type="text"/>	3)	Department Name:	S/W <span style="font-size: small;">▼</span>	4)	Gender:	<input checked="" type="radio"/> Male <input type="radio"/> Female	5)	Address:	<div style="border: 1px solid black; height: 40px; width: 95%;"></div>	6)	Skill Topic	<input type="checkbox"/> C <input type="checkbox"/> C++ <input type="checkbox"/> Java <input type="checkbox"/> .NET	7)	E-mail:	<input style="width: 95%;" type="text"/>	8)	Birth Date:	<div style="display: flex; align-items: center;"> <span style="margin-right: 5px;">(MM)/</span> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center;"> <span style="margin-right: 5px;">(DD)/</span> <div style="border: 1px solid black; width: 40px; height: 20px;"></div> </div> </div>
1)	Employee Id:	<input style="width: 95%;" type="text"/>																							
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3)	Department Name:	S/W <span style="font-size: small;">▼</span>																							
4)	Gender:	<input checked="" type="radio"/> Male <input type="radio"/> Female																							
5)	Address:	<div style="border: 1px solid black; height: 40px; width: 95%;"></div>																							
6)	Skill Topic	<input type="checkbox"/> C <input type="checkbox"/> C++ <input type="checkbox"/> Java <input type="checkbox"/> .NET																							
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HTML5:

**Problem statement-1:** Create a HTML5 web page that looks like:

The screenshot shows a web browser window titled "Appointment Scheduler - Opera". The address bar shows "localhost/D:/html5\_forms/sample.html". The page has a title "Appointment Scheduler". It contains two main sections: "Personal Information" and "Appointment Request".

**Personal Information:**

- Name:
- Telephone number:
- E-mail address:
- Date of birth:

**Appointment Request:**

- What is the reason for your visit?
- Current pain level:
- Preferred date:
- Preferred time:

At the bottom of the form is a "Submit" button.

**Problem statement-2:** Create a HTML5 web page that looks like: (make use of CSS too)

The screenshot shows a web form titled "Registration Details" on a blue background. The form contains several input fields and a "Submit" button.

**Registration Details:**

- University:
- Institute:
- Branch:
- Degree:  ☐ Pursuing ☐ Completed
- Avarage CPI:  Upto  Th Semester
- Experience:  Years
- Your Website Or Blog:

At the bottom of the form is a "Submit" button.

CSS:

**Problem statement-1 :** Create the following web page:

**Name and address**

SSN:  **Fill in name and address**

Full name:

Street and number:

Postal code:

City:

**Username and password**

Username:

Password:  ☐ show password

**Register**

## Javascript:

### Day-1 : JS fundamentals

1. Write a program to accept three positive numbers and output the largest of them.
2. Accept an integer value and a message from user and print the message that many number of times.
3. Write a function to list all even numbers less than or equal to the number n. Take the value of n as input from user. Use while loop
4. Write a function that accepts two numbers and a operator like (+, -, \*, /) from user and performs the appropriate operation indicated by the operator.
5. Write a program to print the multiplication table of a given number up to 10 multiples. Eg for number 2, output should be like

```

2 * 1 = 2
2 * 2 = 4
2 * 3 = 6
2 * 4 = 8
2 * 5 = 10
2 * 6 = 12
2 * 7 = 14
2 * 8 = 16
2 * 9 = 18
2 * 10 = 20

```

6. Write a program to find sum of digits of given five-digit number.
7. Write a program min() that takes any number of arguments and returns minimum number in the set of arguments. Do **not** use the Math predefined object
8. Write a function pow(x,y) that calculates  $x^y$ . Do not use the Math predefined object
9. Create a web page to calculate the Compound Interest using the formula given below:

$$\text{Compound Interest} = \left[ P \times \left( 1 + \frac{r}{100} \right)^n \right] - P$$

Where:

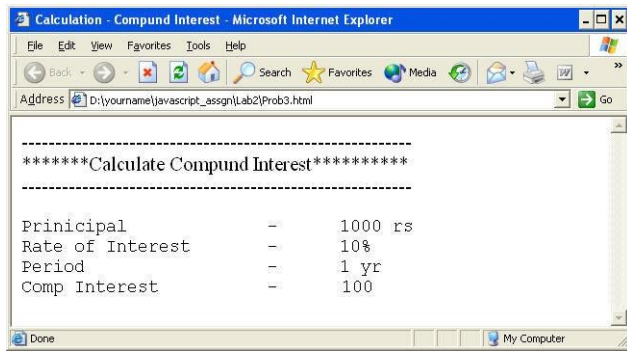
p = Principal,

r = Rate of Interest,

n = period in years

The values used in the example in the following figure are as follows:

P = 1000, n = 1, r = 10



### Day-1 : JS objects (DO Not Use UI for any of these assignments)

10. Create a web page that displays the current date in the format specified as in example below. Also as per current time, suitable greeting should be printed.  
**Today is Monday, 24 April 2000, Welcome, and Good Afternoon to You.**  
**Number of days left till end of year : <display>**
11. Write a function getWeekDay(date) to show the weekday in short format: 'Mon', 'Tue', 'Wed', 'Thurs', 'Fri', 'Sat', 'Sun'.  
 Eg : let date = new Date(2012, 0, 3); // 3 Jan 2012  
 alert( getWeekDay(date) ); // should output "Tue"
12. Accept and store names of 6 employees into array and display in sorted order of names.
13. Create an array that holds 4 employee objects and displays each emp detail in a table. Employee details could be empid, empname and salary. Use for each loop to inspect all properties of each object
14. Create a custom object for rectangle and circle. Individual Rectangle objects should be able to store dimension, and have methods to print area and perimeter. Individual Circle objects should be able to store radius, and have methods to print area and circumference. Display dimensions, area and perimeter of rectangle and circle objects. Make use of pre-defined objects
15. An array contains a set of 5 words. Write Javascript to reverse each word and arrange the resulting words in alphabetical order. Make use of array functions
16. Say, have an array that holds many web site names. Eg, [www.google.com](http://www.google.com), [www.msn.com](http://www.msn.com), [www.amazon.co.in](http://www.amazon.co.in), in.answers.yahoo.com, en.m.wikipedia.com, codehs.gitbooks.io, [www.coderanch.com](http://www.coderanch.com) etc. Search for all sites that begin with "www" and display the total number of such sites. Eg for above eg, total is 4

### Day-2:

17. Create a HTML form that accepts radius and displays the area and circumference of a circle. Make use of Math object

Enter Radius :   
  
 Area : 31416  
 Circumference : 628

18. Create the HTML form given below. Use JS to manipulate strings. Display the output below the button



Enter String :

Enter Sub String :

Replace with String :

☐ Search substring in main string 
 ☐ To Upper Case 
 ☐ To Lower Case 
 ☐ Trim spaces 
 ☐ Concatenate 
 ☐ replace

- 1<sup>st</sup> radio button : search the given sub string (second text box) in main string (first text box)
- 2<sup>nd</sup> & 3<sup>rd</sup> radio button: convert one of the strings to upper/lower case
- 4<sup>th</sup> radio button : trim spaces around first string
- 5<sup>th</sup> radio button : concatenate strings in first and 2<sup>nd</sup> text boxes
- 6<sup>th</sup> radio button : do as shown

19. Write a program that accepts (from the html form) a positive integer less than 1000 and prints out the sum of the digits of this number.

Enter a +ve no less than 1000: -4

Entered number is out of range

Enter a +ve no less than 1000: 1234

Entered number is out of range

Enter a +ve no less than 1000: 546

Sum of the digits of 546 is 15

20. Assume i have an array of member names. Read the array and display all member names as a string delimited by comma all in uppercase

**Members of my Group are**

JOHN,STEVE,BEN,DAMON,IAN

21. Assume we have this content in HTML <body>

```
<body>
<h3> Members of my Group are </h3>
<ol id="list">
</ol>
</body>
```

Also assume we have a array of person names (5 names).

Read from array and populate the above list with member names in bullet form.

**Members of my Group are**

1. John
2. Steve
3. Ben
4. Damon
5. Ian

22. Consider a HTML document made of multiple divs. Search all divs that contain the string "training"



23. **Problem statement-2 : Payment calculator**

Create a following web page and calculate Payment Information based on Loan Information. Validate Loan information textfields for numbers and Payment Information textfields should be uneditable. The other constraints are as follows :

- Amount of Loan should not be more than 15 lakhs.
- Repayment period should be between 7 yrs to 15 yrs.

**Enter Loan Information:**  
1) Amount of the loan (any currency):   
2) Annual percentage rate of interest:   
3) Repayment period in years:   
 **Payment Information:**  
4) Your monthly payment will be:   
5) Your total payment will be:   
6) Your total interest payments will be:

24. Create a Login.html page that accepts username and password. Following are the validations required:

- Both fields are mandatory
- Username must be between 6 to 10 characters, all alphabetic.
- Password should be greater than 8 characters, must contain a # and atleast one digit.

25. Create a HTML page that accepts order details:

Order ID :   
Cust name :  Cust name cannot be < 6 characters  
Enter Billing date :  Billing date cannot be greater than shipping date  
Enter Shipping date :   
Order total :

Following are validations required:

- All fields are mandatory
- Cust name must be greater than 5 characters.
- Billing date must be lesser than shipping date

If all goes well, display as follows; On clicking the display button, all form information must be saved into an Order object. The details of this object must be displayed in a new window in a neat tabular fashion(hint : use `window.open()`)

Order ID :

Cust name :

Enter Billing date :

Enter Shipping date :

Order total :

Order id : 1  
 Cust name : Ankit Enterprises  
 Billing date :2017-10-06  
 Shipping date :2017-10-06  
 Order total : \$10000

26. Create a HTML page that will display the following form and on clicking the button, the details will be listed as shown. Also create an object with all details from form, show them in new window thru the newly created object. **Replace with HTML5 elements wherever possible.**

The following requirements must be met:

- Name: Required, only alphabets allowed, maximum length is 10.
- Lucky number: Required, must be of 4 digits.
- All other fields are mandatory

Name:

Birth Date:

Email Address:  (Use format name@company.com)

Gender: ☒ Male  
☐ Female

Lucky number:  (A number between 1 and 100)

☐ Pizza  
☐ Pasta  
☐ Chinese

You entered:  
 Name: Seema Sharma  
 Birth Date: Jan/1 /1995  
 Email Address: seema.sharma@xyz.com  
 Gender: Female  
 Lucky Number: 13  
 Favorite Food: Pizza" Chinese

**Problem statement-2 :** Use the HTML page created in Problem statement-5.

The following requirements must be met:

- Employee Name: Required, only alphabets allowed, maximum length is 10.
- Employee Code: Required, must be of 4 digits.
- All other fields are mandatory
- Date field must contain valid date
- Add a button "Show details". When user clicks on this button, Create a custom object for the entered information and display it in a new window, and send it to your managers email-id for sanctioning.
- Display appropriate messages incase of invalid data.
- Use the following syntax for sending email :

`<a href="mailto:someone@example.com?Subject=Hello%20again" target="_top"> Send Mail</a>`

