Problem-1 : Create a HTML page that accepts order details:

Order ID : 1

Cust name : Techi   Cust name cannot be < 6 characters

Enter Billing date : 13-10-2017   Billing date cannot be greater than shipping date

Enter Shipping date : 03-10-2017

Order total : 10000

display

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

When user clicks on "display" button, the form must be submitted to the server – an Express JS app.

Extract all incoming form parameters and store into a text file with pipe (|) separated values. Eg, the text file should look like this:

Order.txt:
Ordered|customername|billingdate|shippingdate|otdertotal
101|Jayant Sinha| 2021-12-10| 2021-13-10|5000
102|Mahima Sharma| 2020-12-10| 2020-17-10|7500

If file is written successfully, send a message back to browser – Order 101 successfully saved

Problem-2 : Create a web application to allow end user to perform the following operations on this table.

1. Develop Index page will have 2 hyperlinks specifying the operations as show below

Employee Info Systems

Add New Employee Record
Retrieve Employees

2. By clicking *Add new Employee Record* link user will be taken to new page where he can enter details about new employee and submit as shown below:

Enter Employee Info

Enter ID   :
Enter Name   :
Enter Salary   :
Enter Department :
                      Add

3.Retrieve Employees link will take user to employee List page as shown below.

ID	NAME	SALARY	DEPARTMENT	
12345	Virat	25000	ProductionBU	delete
12346	Rahul	35000	Sales & Mktg	delete
12347	Kapil	44000	FSBU	delete
12343	Jasprit	15000	FSBU	delete

The delete link should delete the employee in that row

Use either an Employee array to store Employee information or use MongoDB to do the same.

Problem-3 : **Matrimony Application** : Develop a web application for an online matrimonial system that allows user to register and search for bride and groom. A person who is looking for bride or groom can use this web application. User will have to first register himself. User can login and search for bride or groom by passing gender and age.
　　Below are the requirements for the application:

　　The system is a Web-based application. When any user accesses the website, following Home page (login) will appear.

　　a.　If user is existing user, he can login by passing username and password. It will authenticate user at server side. If user is valid, welcome page will display.
　　b.　If username/password is invalid, take user back to Login screen with appropriate error message (username invalid or password is invalid)
　　c.　If user is new then user will click on "new user click here" link. Register.jsp page will display.

　　2.　Register.jsp page:

- **While adding details, validate for the following:**
  - ✓ All fields are mandatory.
  - ✓ Password must be at least 6 characters
  - ✓ Username should be unique
  - ✓ Email should be valid
  - ✓ Age and contact number can have only numbers

If all fields contain valid data, record will be inserted in user table and Welcome.jsp page will display.

3. Welcome.jsp page:

Welcome \<username\> to Matrimony

View profile
Search for better half

This page has different links for the user:

*   View profile : Go to profile.jsp page for display user's profile
*   Search for better half : Go to search.jsp page for searching

4. Profile.jsp page:

\<username's\> profile

```
Name     :        John
Gender   :        M
Age      :        34
Address  :        Washington, US
Contact  :        23342334
```

5. Search.jsp page:

Search page

Gender: F ▾
Minimum Age :   [   ]
Maximumm Age :   [   ]

Search page will allow user to search for better half.

6. Result.jsp page:

selected profile

Name	Gender	Age	Address	Contact
Mariya	F		23	M3,Panchganga, UK	9585858596

Result page will search all the record from database those are satisfying condition passed by search page like gender and age.

React Assignments:

1. Create 2 simple React components: About and ContactUs. About should simply display some information about your organization. ContactUs must display contact info like email, url and phone no.

2. Display both components as cards. Use CSS. Sample CSS given (you can use your own styling). Enhance this later with Bootstrap card classes instead of CSS
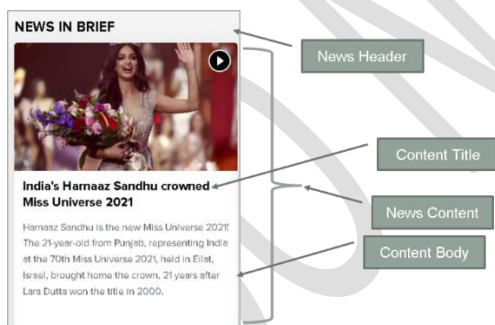
    ```
    .card {
        margin: 2rem auto;
        padding: 2rem;
        width: 40%;
        flex-wrap: wrap;
        border-radius: 6px;
        background: linear-gradient(#f1bca5, #dd7d23);
        box-shadow: 0 0 8px rgba(0, 0, 0, 0.3);
    }
    ```

    About Us!

    ABC company is a multinational product services company headquartered in NYC, US. It specializes in information technology (IT) services and management consulting. It was founded in the United States in 1989. ABC has offices, branches and subsidiaries in 57 countries and territories across Africa, Asia, Europe and North America

    Contact Us!

    Address : your address here
    Phone:+1-000-000-000
    Email : example@abc.com
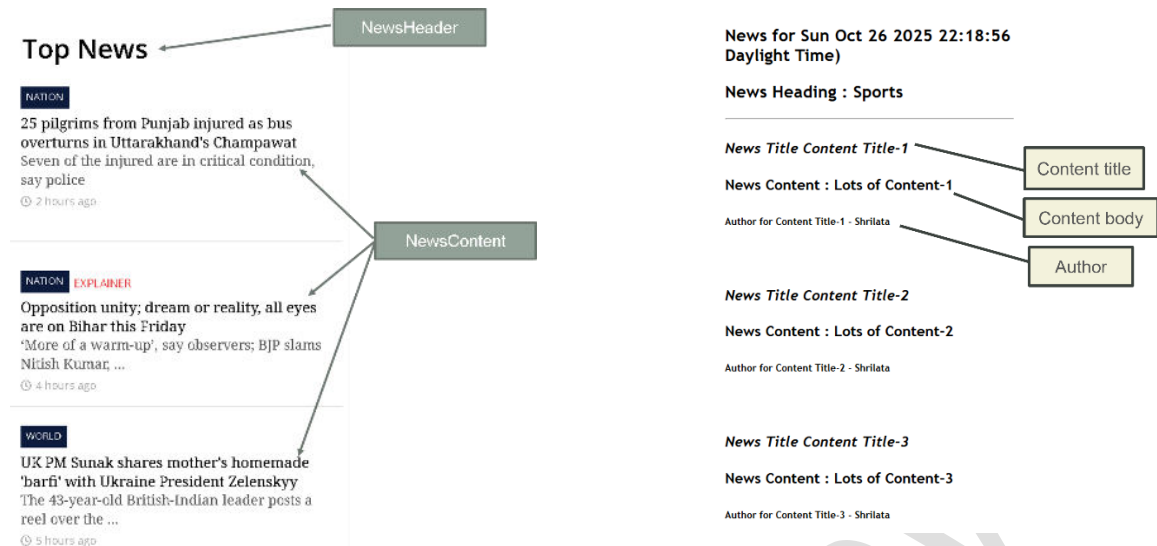   Website : www.yourcompany.com

3. Create a simple React application having 2 components:
    - NewsHeader : simply displays some header info. Eg Top News.
    - NewsContent just displays some content title and content body. Make NewsContent a child of NewsHeader. Don't go for images anywhere
    - Add these components to App and display! A sample given below

    NEWS IN BRIEF

    India's Harnaaz Sandhu crowned Miss Universe 2021

    Harnaaz Sandhu is the new Miss Universe 2021! The 21-year-old from Punjab, representing India at the 70th Miss Universe 2021, held in Eilat, Israel, brought home the crown, 21 years after Lara Dutta won the title in 2000.

    News Header

    Content Title

    News Content

    Content Body

4. Splitting components : Now create 3 NewsContent components under header (eg Top news), each NewsContent having with its own title, content body and author. For this, create 3 additional components – NewsTitle, NewsBody and Author and make them children of NewsContent. Pass the title, News content and author-name as props to NewsTitle, NewsBody and Author components.
    Add these components to App and display! A sample given below

Top News — NewsHeader

NewsContent

NATION
25 pilgrims from Punjab injured as bus overturns in Uttarakhand's Champawat
Seven of the injured are in critical condition, say police
🕑 2 hours ago

NATION EXPLAINER
Opposition unity; dream or reality, all eyes are on Bihar this Friday
'More of a warm-up', say observers; BJP slams Nitish Kumar, ...
🕑 4 hours ago

WORLD
UK PM Sunak shares mother's homemade 'barfi' with Ukraine President Zelenskyy
The 43-year-old British-Indian leader posts a reel over the ...
🕑 5 hours ago

News for Sun Oct 26 2025 22:18:56 Daylight Time)

News Heading : Sports

News Title Content Title-1 — Content title

News Content : Lots of Content-1 — Content body

Author for Content Title-1 - Shrilata — Author

News Title Content Title-2

News Content : Lots of Content-2

Author for Content Title-2 - Shrilata

News Title Content Title-3

News Content : Lots of Content-3

Author for Content Title-3 - Shrilata

5. Create a simple array (list) of employees. Eg:

```
const emps = [
   {ename: "Anita", desig:"Manager", dept:"Trg", email:"Anita@abc.com"},
   {ename: "Kavita", desig:"SSE", dept:"FSBU", email:"Kavita@abc.com"},
   {ename: "Sunita", desig:"Associate", dept:"Legal", email:"Sunita@abc.com"},
 ]
```

Also create a component called "Employee" that will display details of employee

Loop thru the above list and for each iteration, call the Employee component and pass values. Display can look similar to this:

Name:Anita
Designation : Manager
Department : Trg
Email : Anita@abc.com

Name:Kavita
Designation : SSE
Department : FSBU
Email : Kavita@abc.com

Name:Sunita
Designation : Associate
Department : Legal
Email : Sunita@abc.com

Hint : While looping thru, you can use spread operator to spread the employee object like this:

```
{emps.map(emp => (
    <Emp key={emp.ename} {...emp} />
   ))}
```

6. Enhancement: Create a state with a list in it. Use hardcoded values in state to set the values of the news-title and news-body. (once again, don't use images anywhere)

Appy card-style CSS/styles to all the elements (Header as well as content). You can display news horizontally or vertically. Egs given below.
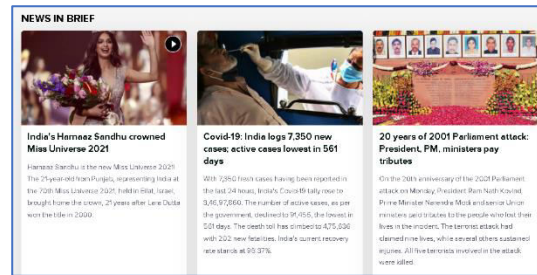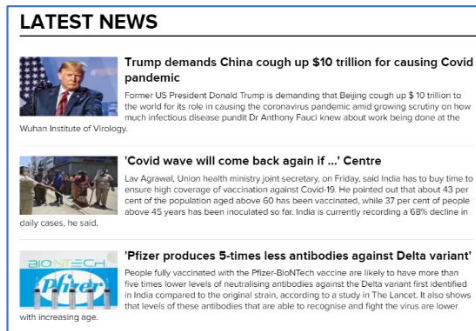
7. Create a form that will accept new NewsContent. Accept Content-Title, Content-Body and author for each NewsContent. Adding this new NewsContent component should update the existing list of news articles

8. You have an array of employee objects in JSON format. Put it into React App's state.

   Create a **class based** component - EmpDataComponent that contains a list of these Employee objects. Create another class-based component – EmpRow which will receive this list from EmpDataComponent and will display emp data in a neat tabular fashion. Pass emp information from EmpDataComponent component into EmpRow component. Output should be something like :

9. Create a React form. When user clicks on button, the full name from both text fields must be displayed (as shown)

10. Create a single Component called ToDoComponent. This component provides a input field for user to enter his ToDo list. The list will be rendered below the field. Clicking on an item in the list should delete the ToDo item from the list. You can use Math.random() to generate id. Perform all actions within this single component and render component in App.js. Initial screen looks like:

When items are added:

Clicking on an item must delete the item:

TODO LIST

| add item . . . | ADD |

Get Groceries

Call Electrician

---

11. Optional : Create a React form as below. On entering a player name and clicking on "add player", an array containing names should be updated with new player name.

Cricket Players

- Virat
- Yuvraj
- Dhoni

Player Name : [   ]
Add Player

12. Create Weather App. I have an array of Weather Information with details like date, weather(sunny/cold/cloudy) and temperature. Loop thru the array. Fetch each weather information. Examine the weather and depending on weather, use a bootstrap icon. Display weather information as shown. Later read weather information from a REST API. The backend will be created by you using the backend technology you know.

5-Day Forecast.

New York, US

Friday	Saturday	Sunday	Monday	Tuesday
March 1st, 1:00 pm	March 2nd, 1:00 pm	March 3rd, 1:00 pm	March 4th, 1:00 pm	March 5th, 1:00 pm
35 °F	36 °F	36 °F	34 °F	26 °F
clear sky	light rain	broken clouds	clear sky	scattered clouds

NodeJS assignments:

1. Print the following (use nested loop):

```
1
22
333
4444
55555
666666
7777777
88888888
999999999
```

2. Write a function nameLength() that accepts an array of employee names. Find and display those employee names, which are more than 4 characters.
   For example : ["Joy","Meena","Anne","Xi","Veena"]
   The following should get displayed : Meena Veena

3. Write a function min() that takes a array and returns minimum number in the set of arguments. . Do not use the Math predefined object

Local Modules:

1) Create a user defined local module greet.js containing a function greet() that greets user based on time of the day. If its morning, greet user as "Good morning", if its afternoon, greet user as "Good Afternoon" else as "Good Evening"

   Create a client module that will bring in the greet.js module and invoke the greet function

2) Create a user defined local module calc.js that exposes the following functions: add(a,b), subtract(a,b), multiply(a,b), divide(a,b), square(a), min(a,b,c), max(a,b,c)
   - Create a client application that invokes each of these methods
   - Make use of Math predefined core object. Create a client application that invokes each of these methods

3) Create 3 user defined modules that deal with shapes: circle.js, rectangle.js, triangle.js
   - Circle.js has functions like : calcArea(radius), calcCircumference(radius), calcDiameter(radius)
   - Rectangle.js – calcArea(length, breadth), calcPerimeter(length, breadth)
   - Triangle.js – isEquilateral(side1, side2, side3), calcPerimeter()

File handling:

4) Create an array of names. Read the contents of array and save into a file – names.txt as a string delimited with | (pipe)
   eg var arr = ["aaa","bbb","ccc"] must be stored in file as aaa|bbb|ccc

5) File handling: Assume I have a file emp.txt that contains employee data in the following format:

```
1001:Harry   :Sales  :23000
1002:Sarita  :Accounts :20000
1003:Monika:TechSupport:35000
```

Read the file. Display total sum of salary of all employees. In this example, it must display 78000

6) Consider an array that holds 4 employee objects. Emp details could be empid, empname and salary. Loop thru this Employee array and store the employee objects in a text file using same format as follows:

1001:Harry :Sales :23000
1002:Sarita :Accounts :20000
1003:Monika:TechSupport:35000
…

7) Assume a customer.json that has an array of customers with details like customer name, address, ph no, credit-rating etc for each customer. Read this file, parse the json and display all customer names along with their contact details

```
[
    {
        "custname":"Anil Patil",
        "address":"abd 123",
        "phno": "8877669988",
        "rating":8
    },
    {
        "custname":"Anita Kulkarni",
        "address":"A102, Highstreet",
        "phno": "99675456",
        "rating":7
    },
    {
        "custname":"Kavita Menon",
        "address":"BB203, Pune",
        "phno": "123456789",
        "rating":9
    }
]
```

8) Consider a json array object that describes an array of books with bookid, name, author and selling price. Loop thru array, calculate discount on each book and hence final price, convert each book json object into string in below format and save into a file book.txt
eg, assuming discount of 10% on all books:
Bookid|bookname|author|Sellingprice|finalprice
1001|Core Java|Cay Horstman|500|450

9) Create a simple text file. Now use node file handling to read each line from text file, prefix line with a number and display.

Sample text file:
Node is a JS runtime platform
Created with C++ and Javascript
Runs on the V8 engine
Created by Ryan Dhal

Output :
1. Node is a JS runtime platform
2. Created with C++ and Javascript
3. Runs on the V8 engine
4. Created by Ryan Dhal

Node HTTP and the web:

10) Write a browser based app. Everytime a http request comes in, server must send a greeting back to user depending on time of the day. Use the Greet.js module created earlier.

ExpressJS ass:

11) Create a html form that takes three strings and passes these parameters to ExpressJS application. This application must respond with HTML that displays all parameters in an unordered list:
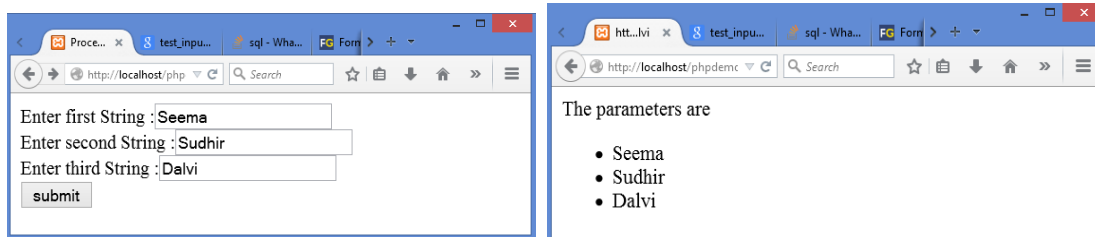
12) Develop a web application as follows:
   - Design **simpleInt.html** to capture Principal Amount, No of years and rate of Interest
   - **A ExpressJS application** will receive these numbers and will generate response with simple interest value to user

13) Develop a login app. The login.html must accept username and password and submit to node. At server side, create a Javascript array that contains username and password as comma separated values. Enter 3 user details.

```
let users = [
    {uname:"shrilata", pass:"secret"},
    {uname:"admin", pass:"admin123"},
    {uname:"user1", pass:"pass1"},
]
```

Middleware must check if username and password is available in a Javascript array. If yes, send success.html, else failure.html

14) Create a ExpressJS application with an HTML that accepts username and password. HTML has a submit button called "Signup". On submitting the form, store the username and password details as a json object into an array

15) Create a ExpressJS application. At server side create an array of students with studentid, student name, course.

```
let studs = [
    {sid:101, sname:"Savita", course:"DIoT"},
    {sid:102, sname:"Kavita", course:"DAC"},
    {sid:103, sname:"Anita", course:"DESD"},
    {sid:104, sname:"Sunita", course:"DIoT"},
    {sid:105, sname:"Babita", course:"DMC"},
]
```

Use Restful URL to search on name (eg URL highlighted in below screenshot). On receiving name, search thru array and to find the correct student and return student details as shown below.

Student id : 101
Student name : Savita
Student course : DIoT

Go Back to List
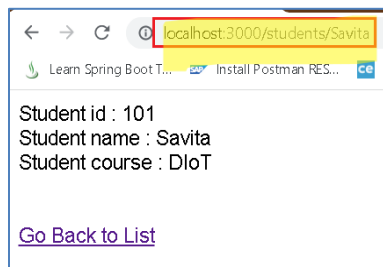
16) In the previous App, create another path (localhost:3000/students) to fetch all students. This will be my Rest endpoint.
   a) Create an ajax application that will connect to this endpoint, fetch all students details and display in HTML as a neat HTML table
   b) Create another ajax application that has an HTML to accept student name. Concatenate this name to a get request URL and fetch and display that student details in browser

Next gen Javascript ass:

1. Write a function transformToObjects() that transforms a list of numbers into a list of JavaScript objects.
For the provided input [1, 2, 3] the transformToObjects() function should return [{val: 1}, {val: 2}, {val: 3}].

```
function transformToObjects(numberArray) {
   // Todo: Add your logic
   // should return an array of objects
}
```

2. Consider an array of products objects. For each product, we store productid, productname, price and category. Eg productArr = [{pid:1001, prodName:"Gaming headset",3000,"Headset"}....]
   Using Javascript forEach, loop thru the product array and display contents in neat HTML table

3. Consider the product array in last example. Iterate thru the array, filter out all products that have the category "toys" and put in a new array ToyArray. Display the array. Use Javascript's array.filter() for this

Lab Assignments:

HTML:

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

<u>Resume</u>

Abc Pqr
Unit 55, SDF II,
SEEPZ, Andheri(E),
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:

Nested List

    I. Background Skills
        A. Unix Commands
        B. Vim Test Editors
    II. HTML
        A. Minimal Page
        B. Headings
        C. Elements
        D. Lists
            i. Unordered
            ii. Ordered
            iii. Definition
            iv. Nested
        E. Links
            i. Absolute
            ii. Relative
        F. Images
    III. CSS
        A. Anatomy
        B. Basic Selectors
            i. Element
            ii. Class
            iii. ID
            iv. Group
        C. The DOM
        D. Advanced Selectors

Problem statement-3.a : Create a web page to display tables as shown in the figures below.

User Name	Education	Location
Praveen Kumar	B.Tech	Guntur
Mahendra Dasari	CA	Chennai
Nagaraju Dasari	MCA	USA
Sateesh Alavala	MD	Vizag
Sudheer	B.Tech	Kakinada

3.b

STATE	
East	Orissa
	Bihar
	West Bengal
	Mizoram
West	Maharashtra
	Gujrat
	Karnataka
South	Andhra Pradesh
	Tamil Nadu
	Kerala
North	Jammu & Kashmir
	Himachal Pradesh
	Punjab
	Uttar Pradesh

3.c

Flight Schedule				
Flight Number:	From:	To:	Departure:	Arrival:
BA 3451	Heathrow	Nuremberg	19:20	19:50
BA 1254	Luton	Alicante	19:40	20:50
LH 331	Heathrow	Hamburg	20:00	20:20
				Total: 3 flights

3.d: 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
Core Java	Cay Horstman	400
Beginning Java	Ivar Horton	600
Learning Java	Kishori Shahane	400
Java Cookbook	John Keller	800

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

Problem statement-5: Create the two web pages to display as shown in the figures below

Name	Value
Name	
Sex	○ Male ⦿ Female
Eye color	green ▾
Check all that apply	☐ Over 6 feet tall ☐ Over 200 pounds
Describe your athletic ability:	
Enter my information	

5-a:

5-b:

Username: [   ]
Password: [   ]
City of
Employment: [   ]
Web server: [— Choose a server — ▼]

Please specify
your role:
  ○ Admin
  ○ Engineer
  ○ Manager
  ○ Guest

Single Sign-on
to the following:
  ☐ Mail
  ☐ Payroll
  ☐ Self-service

[Login] [Reset]

5-c :

Register

Kindly fill in this form to register.

Username
[Enter username]
Email
[Enter Email]
Password
[Enter Password]
Confirm Password
[Confirm Password]

[Register]

Already have an account? Log in.

HTML5 + CSS:

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

Appointment Scheduler

─ Personal Information ─
Name
[   ]

Telephone number
[   ]

E-mail address
[   ]

Date of birth
[▼]

─ Appointment Request ─
What is the reason for your visit?
[Select or type your reason]

Current pain level
[────●────]

Preferred date
[▼]

Preferred time
[: ▼]

[Submit]

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

Problem statement-3: For the registration form created in HTML 5-C, provide CSS, so that form now looks like this:

CSS assignments:

1. Set the background color of a page to lightblue.
2. Consider this sample data:

```
Sample Data :

<body>
<h1>abc</h1>
<p>This is para-1</p>
<div id="div1">
  <h1>div-1</h1>
  <p>This is para-2</p>
  <h1>div-2</h1>
  <p>This is para-3</p>
</div>
<h1>xyz</h1>
<p>This is para-4</p>
</body>
```

- Change background color of div to green

- Change text color of the second "h1" to red and background color to gold
- Align only paras within a div tag to right
- Show the last para in bold with font family as Calibri. Display the text in uppercase with a ~~strikethrough effect~~

3. Given the following sample data:

```
<ul>
<li>Marketing</li>
<li>Sales</li>
<li>Technology</li>
<li>Customer Support</li>
</ul>
```

Use CSS to change the background color and draw the border around the <ul> element as shown

4. Consider a document with multiple paras.
    - Indent 1st line of each para similar to below figure.
    - Also justify the margins of all paragraphs.
    - Provide a paragraph header and align it to center
    - Set the background of document to the CSS logo

5. Redo the table in Problem statement-3.a of HTML. Use CSS to provide table border and font and background color for table heading

User Name	Education	Location
Praveen Kumar	B.Tech	Guntur
Mahendra Dasari	CA	Chennai
Nagaraju Dasari	MCA	USA
Sateesh Alavala	MD	Vizag
Sudheer	B.Tech	Kakinada

6. Write a HTML page that has a small text content. Highlight a small portion of the content in blue and underline using embedded/instyle CSS. Eg:


7. Consider the following table. Create 2 CSS classes and apply these classes to alternate rows of table to give zebra effect

Employee Name	Department	Salary
Jane Smith	Marketing	$95,000
John Smith	Technology	$90,000
Brian Adam	Sales	$72,000
Mary Jones	Support	$60,000
Michael Jefferson	Technology	$85,000

Test It

8. Refer to problem statement-2 in HTML. Use CSS to highlight the first item in every list to green (lightgreen)
9. (**optional**):
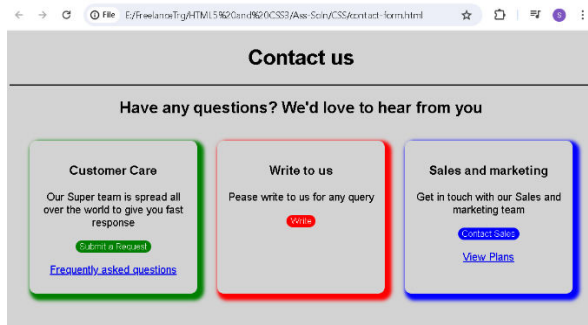
Javascript Lab Assignments:

Day-1 : JS fundamentals

1. Accept an integer value and a message from user and print the message that many number of times.
2. Find the greatest of 3 nos, accept no from user using prompt()
3. Write a program 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 program that accepts two numbers and a operator like (+,-,*, /) from user and performs the appropriate operation indicated by the operator. Use switch case
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. 12345 = 15
7. Write a program **cmi.js** that that has a function that accepts a distance in inches and prints the corresponding value in cms. Note that 1 inch = 2.54 cm. Test the js file in HTML.
8. Write a function pow(x,y) that calculates x^y. Do <u>not</u> use the Math predefined objet
9. Write Javascript function to find the sum and average of all passed parameters. Pass 3 parameters to the function
10. Write a program to find the sum of squares of even numbers upto N (accept from user). Create a function to find sum
11. Create a web page to calculate the Compound Interest using the formula given below:

Compound Interest = $\left[P * \left(1 + \frac{r}{100} \right)^n \right] - P$
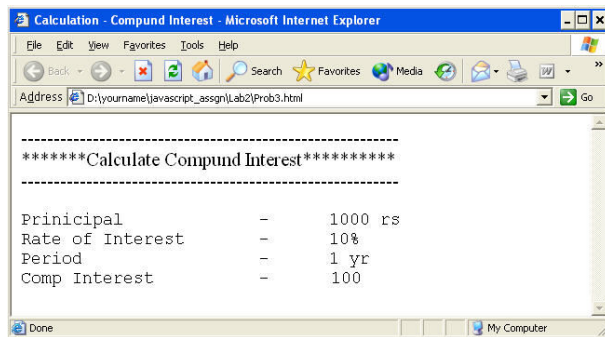
Where:
p = Principal,
r = Rate of Interest,
n = period in years
The values used in the example in the following figure are as follows:
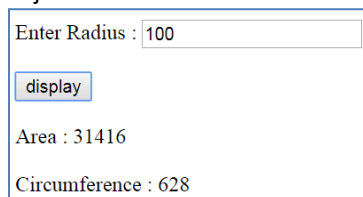P = 1000, n = 1, r = 10

JS objects

1. 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.

2. Write a function getWeekDay(date) to show the weekday in short format: 'MO', 'TU', 'WE', 'TH', 'FR', 'SA', 'SU'.
     Eg : let date = new Date(2012, 0, 3); // 3 Jan 2012
    alert(getWeekDay(date));   // should output "TU"

3.   Accept and store names of 5 employees into array and display in sorted order of names
4. WAP to accept 10 words from the user into an array. Print all those words which are even in length and starts with A or a?

5. WAP to create a simple initialized int array with 5 integers. Iterate thru the array and find sum and average of all elements. Eg given array : var arr = [11,22,33,44,55]

6. WAP to create a simple initialized int array with 5 integers. Create a new empty array. Read the contents of initialised array and for every element, find square of the number and store into new array. Use appropriate array methods

7. WAP that has 10 numbers already stored in an array. Find the average of all numbers and then print how many numbers are above average.

8. We have an array that holds many web site names. Eg, www.google.com, www.msn.com, www.amazon.co.in, in.answers.yahoo.com, en.m.wikipedia.com, codehs.gitbooks.io, 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

9. Create an array that holds 4 employee objects and displays each emp detail in a table. Emp details is part of an custom Employee object and could be empid, empname and salary. Use for each loop to inspect all properties of each object

10. 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 Math pre-defined objects

11. Define a custom class Student with stud-name and course as properties and a function getDetails() which will print student details
    - Extend the Student class to create a GraduateStudent class which has an additional property "gpa"
    - Create objects of graduate student with name, course and gpa. Override the getDetails() methods from Student class to display gpa as well

12. Define a class Rectangle with its length and breadth.
- Provide appropriate constructor(s), which sets rectangle object with values.
- Provide methods to calculate area, calculate perimeter and to display all information of Rectangle (dimensions, area and perimeter).
- Create 5 Rectangle objects by hardcoding all necessary information. Add the objects into an array. Iterate thru the array and for each rectangle object, calculate its area and display its information

Day-3

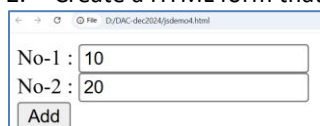1. Create a HTML form that accepts radius and displays the area and circumference of a circle. Make use of Math object

Enter Radius : 100

display
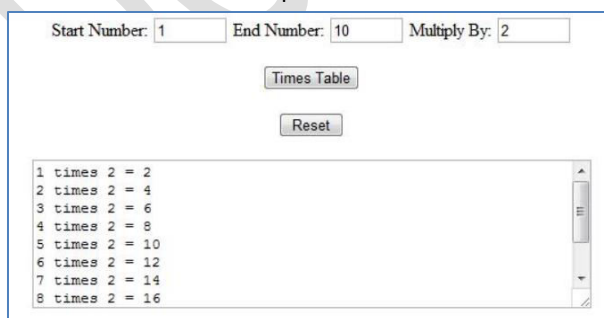
Area : 31416

Circumference : 628

2. Create a HTML form that accepts 2 numbers and displays sum of numbers at bottom of form

No-1 : 10
No-2 : 20
Add

3. Create a HTML form that accepts start and end values and displays multiplication table

Start Number: 1   End Number: 10   Multiply By: 2

Times Table

Reset

```
1 times 2 = 2
2 times 2 = 4
3 times 2 = 6
4 times 2 = 8
5 times 2 = 10
6 times 2 = 12
7 times 2 = 14
8 times 2 = 16
```

4. 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

5. 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 in the current document window
    eg : var names = ['John','Steve','Ben','Damin','Ian']

Members of my Group are

JOHN,STEVE,BEN,DAMON,IAN

22. Assume we have this content in HTML <body>. An empty list and a button

```
<h3> Members of my Group are </h3>
<ol id="list">
</ol>
<input type="button" onclick="f1()" value="Populate list">
```

Members of my Group are

Populate list

Also assume I have a list of names. When I click on the button, script should read all names from array and polulate the list with list items. Output must look like this:

Members of my Group are

1. Kavita
2. Anita
3. Sunita
4. Babita

Populate list

Use procedural DOM methods like createElement(), querySelector(), appendChild() etc for this assignment. Please refer to given PPT for examples on how to do this

6. 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 below the form thru the newly created object. Email has to be valid. Lucky number must be in range 1 to 100

Enter Your Details

Name: Anita
Birth Date: 11 - 11 - 2025
Email Address: anita@gmail.com
Gender: ○ Male
                        ● Female
Lucky number (1-100): 4
                        ☑ Pizza
Favorite Foods: ☐ Pasta
                        ☑ Chinese

Send Data

You entered
Name: Anita
Birth Date: 2025-11-11
Email Address: anita@gmail.com
Gender: Female
Lucky Number: 4
Favorite Food: Pizza Chinese

7. Create a HTML table. Apply zebra stripes using javascript. Zebra stripes means that alternate rows are colored so that each row is clearly defined. Eg

Student name	Course	Grade
Manisha Patel	DAC	B
Savita Rao	DITISS	B
Arnav Patil	DIoT	A
Anita Kapoor	DAC	A

8. Create a Java Script object that holds an array of at least 3 Java Script objects to store information about accounts:
    account no - Numeric
    account name - String
    account balance - Numeric
   Write a Java Script program to perform the following operations:
   A) Display the total balance
   B) Loop thru array and display all account information in neat HTML table

Welcome to Javascript

Acct ID	Acct Name	Acct Bal
1001	Soha	90000
1002	Shrilata	80000
1003	Sunil	100000
1004	Anita	40000

9. Create a HTML page that will display the following Registration form and on clicking the button, the details will be listed as shown. Create an object with all details from form and add to an array. Display the contents of the array in a neat tabular manner at bottom of form

Registration form

Username : Anita
Password : ••••••
Email : anita@gmail.com

add

Username	Password	Email
Shrilata	secret	shri@gmail.com
Anita	ani123	anita@gmail.com

10. Create an IPL ticket booking form to accept spectator details.

Spectator name :

Email Id :

Confirm Mail id :

Select stand : Platinum Gallery / North West Stand / East Stand / Super Hospitality Stand

Cost of Ticket :
book now

- All text fields are mandatory
- EmailID and Confirm EmailId field values have to be same.
- Cost of ticket will be picked up, based on the stand selected. Use the table provided to select the cost. The field cannot be an editable field.
- Use the "book now" button to calculate ticket cost. If all the data is valid show an alert "All data entered correctly"
- Depending on Stand selected, cost of ticket would be:

Stand	Floor	Charges (In Rs)
Platinum Gallery	Not applicable	25000
Super Hospitality Stand	Not applicable	20000
North West Stand	First floor	6000
East Stand	First floor	3000

- **Make use HTML, HTML5, Javascript, CSS**
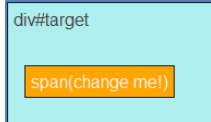
jQuery Lab Assignments:

1. Find all h1 elements that are children of a div element and apply a background to them.

```
Sample Data :

<body>
<h1>abc</h1>
<div id="div1">
  <h1>div-1</h1>
  <h1>div-2</h1>
</div>
<h1>xyz</h1>
</body>
```
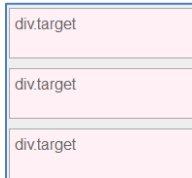
2. Set the background color of a page to lightblue.
3. Use the sample data in question1. Change background color of div to green
4. Change the text in the span, a child of '#target'

5. Change background color of the second 'div'.

6. Hide all the input elements within a form. You may use one of the web page created in HTML lab
7. Find the specific option tag text value of a given option. For eg, show the text value associated with second option (Should display Option-2)

8. Write jQuery code to append a div element (and all of its contents) dynamically to the body element. Insert the following code within HTML <body> tag : <div><h1>JQuery Core</h1></div>
9. Write a jQuery Code to get a single element (li) from a list. Sample data: second list item is "Kiwi"

```
<body>
<ui>
<li>Apple</li>
<li>Kiwi</li>
<li>Strawberry</li>
</body>
```

10. Given the above list, prepend each list item with a index number. Eg, display should be:

```
0:Apple
1:Kiwi
2:Strawberry
```

11. Assume a web page having 3 divs, one of them having a class applied. Find which div element has class applied. Sample data: (output would be div1)

```
<body>
<div id="div1" class="divclass"></div>
<div id="div2" </div>
<div id="div3" </div>
</body>
```

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

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

13. 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

14. Create a web page that accepts person name, age and whether employed (true/false) using HTML form elements.
On clicking "add" button, create a JSON obj with the person details. Add (push()) this json into an array.
Provide another button "display" which will iterate thru array and display all persons details in a neat HTML table.

Bootstrap Lab Assignments

1. Create a dynamic layout containing blog posts. It must have a header that spans across the width of the whole website.
Then we have a three-column layout containing blog posts, when viewed on a desktop. In a tablet, the posts are contained in a two-column layout instead of three. The same website when viewed on mobile devices must display all posts in a single column.

My First Bootstrap Blog

Hear any good news lately?
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The Beauty of Being Alone This is a list of fun things you can do by yourself (or with friends in some cases). I've included TONS of links to some GREAT sites that can help get you moving and keep you entertained, so please feel free to share this post...

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2. Create a simple vertical form in bootstrap:

Name

Your Name

Email

Your Email

Phone

Your Phone Number

Description

Your Comments

Submit   Reset

3. Create a simple form in Bootstrap as shown:

4. Create the following webpage using navbar, jumbotron, buttons, glyphicons, grids etc

5. Create a layout like given: