

Java Script basic Assignments

1. Prompt the user for their name, check for valid entry and display it.
2. Use a pop-up box to welcome the user by name.
3. Display the current date on the page in the following format:

October 30, 2000. Do not display the time. Do not "hard code" the date; the date should be the current date every time the page is loaded.
4. Display the last modified date of the document.

DOM functions exercises

- Use the html file Page.html. Add java script code in this Page.html page to retrieve each <p> and <div> element in document and display their attributes.
- Add a new div element after the div element having the id equal to 'id2' and add another image 'images/Water lillies.jpg' to this new Div element.
- Change the align attribute of paragraph having id='p1d' to right and add new text to this paragraph.
- Load the xml file States.xml in html using window.open function. Applying DOM functions read the all the state element values and write in newly created Div block dynamically at the end of current page..

JavaScript MVC Exercise

Define a page containing Div with red color, P with blue color contents and two text input elements. Handle the events on both inputs in such a way that whenever text is updated/entered in one of the input the same is reflected in other text input and both div and P elements.

5. Make an HTML page with a pushbutton that directly pops up an alert box. You do *not* need to load a JavaScript file to do this: your pushbutton can just directly call 'alert("Hi")'.
6. Make an HTML page with a pushbutton that calls a JavaScript function that pops up an alert box. The difference here from problem 1 is that the pushbutton invokes a JavaScript function that you wrote, so you have to load the JavaScript file with the <script> tag.

- 5.1. Put some useful advice, on any subject, in the status line of the browser.
- 6.1. Display a message saying Good Morning if it is in the morning, Good Afternoon if it is in the afternoon and Good evening if it is in the Evening.
7. Define a java script program to swap two string objects by using traditional temp variable method to store the value of one object and check the results.
8. Write a program to check the passed date object is valid by comparing its attributes.
9. Write the date.html web page to report the current date (just the day of the month, month year in the format DD/MM/YYYY) and the number of days before the end of Term (which is on **Thursday** 20 March this year).
10. Write a JavaScript function daysAfter(date2, date1) to calculate and return the number of days between dates.
11. Write a function to get the Monday of the week in which date1 falls. Write and test a function called mondayBefore(date) which returns a date object corresponding to the Monday immediately before.
12. Define a card function object to create card instances with properties like name, address, workphone, homephone and email. Define a object function to print these values. (Use custom function objects)
13. Define a page with two drop down lists. Second list is dynamic, i.e. make the choices that appear in the second drop down list depend on what choice is made in the first list.
14. Create a webpage containing four buttons which behave as follows when clicked: the first turns the background purple; the second turns the background yellow; the third turns the background pink; and the fourth turns the background black. The buttons should have the appropriate "labels" on them.
15. create a webpage as follows: It should contain three links, which may link to any location you decide. The first link should change the *default* status message to "Please click a link". The second link should change the window status message to "Link 1" The third link should change the status message to "Link 2" (Use the window.status which is intended to display status bar messages that are only to be shown briefly (like during a mouseOver event)).
16. Create a webpage as: It contains three links (make sure at least some of them are "unvisited") and two buttons, called "Color Scheme 1" and "Color Scheme 2" which, when clicked, cause the background, text, and link colors to change to a new pattern (that is "Color Scheme 1" should cause one set of colors to appear; "Color Scheme 2" should be a different set).
17. Create a page where by clicking on the buttons, you add or remove content in the page via DOM manipulation. (Use document methods)
18. Use the String object attributes and functions in a web page with Javascript:
 - a. the length attribute;
 - b. the split() function;

- c. the `charAt()` function;
 - d. the `toLowerCase()` function;
 - e. the `toUpperCase()` function;
 - f. the `substring()` function; and
 - g. the `join()` function of the Array object
19. Define scrolling text by using `setTimeout()` function for timer events.
 20. Define a function `max()` that takes two numbers as arguments and returns the largest of them. Use the if-then-else construct available in Javascript.
 21. Write a function that takes a character (i.e. a string of length 1) and returns true if it is a vowel, false otherwise
 22. Define a function `sum()` and a function `multiply()` that sums and multiplies (respectively) all the numbers in an array of numbers. For example, `sum([1,2,3,4])` should return 10, and `multiply([1,2,3,4])` should return 24.
 23. Write a function `findLongestWord()` that takes an array of words and returns the length of the longest one.
 24. Write a function `charFreq()` that takes a string and builds a frequency listing of the characters contained in it. Represent the frequency listing as a Javascript object. Try it with something like `charFreq("abbabcbdbabdbdbabababcbcbab")`.
 25. Make a script that adds a *first5* method, which returns the first five characters from the any *String* object passed to it.

Java Script for data validation

1. Create a form that includes 2 textboxes (one for name, one for email address), a textarea, a dropdown box (<select> tag), a set of radio buttons, and a set of checkboxes. Format the form using a table. The ACTION attribute of the form tag should be to email the form results to your email address. Add JavaScript event handlers to the form to validate the form before it is emailed.
 - a) Validate that an entry has been made in each form element
 - b) Validate that the email address contains an @ sign and '.' Character and minimum to letters after it.
3. If there is a problem, display the problem with the page in following possible ways:
 - a pop-up box
 - displaying the problems in a new window in red text and having the user use the back button to go back to the original page
 - displaying the problems in the current window at the top of the page in red text
 - displaying the problem in another frame
