



Uka Tarsadia University

Asha M. Tarsadia Institute of Computer Science and Technology

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Sr. No.	Practical	Submission Date	Sign
1	Write a JavaScript to demonstrate properties and methods of String reference Type.		
2	Write a JavaScript to demonstrate properties and methods of Array Collection Reference Type.		
3	Write a JavaScript to demonstrate properties and methods of Date reference Type.		
4	Write a JavaScript to create a cart contains items of categories like groceries, apparels, accessories and gadgets. Each category offers discounts 10%, 20%, 5% and 50% discounts. Apply discount on the times present in the cart and generate a Final bill. [Hint: Use objects containing key-value pair]		
5	Create a regular expression to find pattern from the given text as follow: 1) All the words starting with 'A'. 2) All the words starting with consonants. [Bonus Program: Upload a file using PHP and find above mentioned patterns using JavaScript RE only from the text present in the file.]		
6	Take input from user through prompt box and store it in an array. Print the Fibonacci series till the indexed number in the array. [Hint: Use Iterative Methods of array]		
7	Take input from user through prompt box and store it in an array. Calculate the Factorial of each number present in the array using iterative method of array and generate the resultant array of factorial values. [Bonus Program: Create the same program combining the iterative methods concept and recursion.]		
8	a) Write a demonstrative JavaScript for i) Function methods, ii) Function internals b) Write a JavaScript to implement function overloading using function internals.		
9	Write a demonstrative JavaScript for i) Map, weakmap and Set, ii) Function Closure, and iii) Typed array with ArrayBuffers.		
10	a) Write a JavaScript to list the properties of an object using iterator and generator. b) Write a JavaScript to delete the name property and change the class property value from the following object. Also print the object before and after the said operations. [Hint: Use data properties of a JavaScript object.]		

	<p>c) Write a JavaScript to update the rollno property value based on the sclass value. Perform this using accessor property of a JavaScript object.</p> <p>[Hint: for sclass: VI, the rollno is 12. If the sclass: V, the rollno should be 13.] Sample object: let student = { name : "David Rayy", sclass : "VI", rollno : 12 };</p>		
11	<p>a) Write a JavaScript to get the volume of a Cylinder with four decimal places using object classes. [Hint: Volume of a cylinder : $V = \pi r^2 h$, where r is the radius and h is the height of the cylinder.]</p> <p>b) Write a Bubble Sort algorithm in JavaScript using OOP concept. [Bonus: Create a php page which take names of students. List the name using the algorithm developed in this practical.]</p>		
12	Write a JavaScript to create a tip calculator that help determine how much to tip at restaurants or whenever the need arises.		
13	Write a JavaScript to create election map. The code should have two candidates running for president and display the number of votes they received from each state, both in a table on the bottom right and when you hover mouse over a state. [Hint: BOM, DOM, Events] [Bonus: Created map should change the colour and pop the name of the state.]		
14	Write a JavaScript to perform form validation using regular expression.		
15	Write a demonstrative JavaScript for JavaScript APIs.		
16	Write a React code to build a simple search filter functionality to display a filtered list based on the search query entered by the user.		
17	Write a react code to create a simple counter which increments or decrements count dynamically on-screen as the user clicks on the button.		
18	Write a react code to create an accordion that toggles text content on click of the accordion header.		
19	Write a react code for simple login form where the user login by entering their username and password. The form inputs are validated to check if correct information is entered and the error messages are if the validation fails. The login form is hidden and the "Welcome, \$ {name}" message is shown when the user login is successful.		
20	Write a react code to display a checklist with multiple options that can select and the selected options are dynamically displayed on the screen.		