1. Create a digital clock and formatted date, which changes time as per system clock time.

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <script>  function startTime() {  var today = new Date();  var h = today.getHours();  var m = today.getMinutes();  var s = today.getSeconds();  m = checkTime(m);  s = checkTime(s);  var dateString = today.toLocaleString();  document.getElementById('txt').innerHTML =  dateString+ "-" + h + ":" + m + ":" + s;  var t = setTimeout(startTime, 1000);  }  function checkTime(i) {  if (i < 10) {i = "0" + i}; // add zero in front of numbers < 10  return i;  }  </script>  </head>  <body onload="startTime()">  <div id="txt"></div>  </body>  </html> |

1. Create array of even and odd series numbers. Find median for both the series

Input List:

list\_1 = [8, 3, 9, 1, 4, 7];

list\_2 = [10, -2, 0, 5, 3, 1, 7];

list\_3 = [3, 8, 9, 1, 5, 7, 9, 21];

|  |
| --- |
| **Method 1**  function median(list) {  list.sort(function (a, b) {return a - b;});  var list\_len = list.length;  if ((list\_len % 2) == 1)  return list[Math.floor(list\_len / 2)];  else  return Math.round((list[list\_len / 2 - 1] + list[list\_len / 2]) / 2);  }  var my\_list\_1 = [8, 3, 9, 1, 4, 7];  var my\_list\_2 = [10, -2, 0, 5, 3, 1, 7];  var med = median(my\_list\_1);  document.write("Median of [", my\_list\_1, "] is: ", med, "<br />");  med = median(my\_list\_2);  document.write("Median of [", my\_list\_2, "] is: ", med, "<br />"); |
| **Method 2**  function median(values) {  values = values.slice(0).sort( function(a, b) {return a - b; } );  return middle(values);  }  function middle(values) {  var len = values.length;  var half = Math.floor(len / 2);  if(len % 2)  return (values[half - 1] + values[half]) / 2.0;  else  return values[half];  }  var list1 = [3, 8, 9, 1, 5, 7, 9, 21];  median(list1);  list1.sort(function(a, b) {return a - b; });  middle(list1); |

1. Create an application to ask user to enter students list in your class as per admission.
   1. Ask user using button click insert and remove new student in the list the following order
      1. Sort the List and Display Length of the List
      2. End of the List
      3. Beginning of the List
      4. Insert specific position of the list as per user choice
      5. Remove Beginning and End of the List
      6. Join Boys and Girls List with alphabetical order
      7. Extract part of the student list

|  |
| --- |
| **Students.html**  <!DOCTYPE html>  <html>  <head>  <title>Student</title>  </head>  <body>  <input type="text" name="name" id="textBox"><br><br>  <button onclick="addAtLast()">Add At Last</button>  <button onclick="addAtFront()">Add At Front</button>  <button onclick="addAtIndex()">Add At Index</button>  <button onclick="addTwoArrays()">Add Two Arrays</button>  <button onclick="getPartOfArrays()">Get Part of Arrays</button>  <h3>List of students</h3>  <div id="students"> </div>  <script type="text/javascript" src="student.js"></script>  </body>  </html> |
| **Student.js**  var studentList = [];  function addAtLast(){  var textBox = document.getElementById('textBox');  var students = document.getElementById('students');  var studentName = textBox.value.toString();  if(studentName == ""){  return;  }  studentList.push(studentName);  students.innerHTML = "";  for(var i = 0; i < studentList.length; i++){  students.innerHTML += studentList[i] + "<br>";  }  }  function addAtFront(){  var textBox = document.getElementById('textBox');  var students = document.getElementById('students');  var studentName = textBox.value.toString();  if(studentName == ""){  return;  }  studentList.shift(studentName);  students.innerHTML = "";  for(var i = 0; i < studentList.length; i++){  students.innerHTML += studentList[i] + "<br>";  }  }  function addAtIndex(){  var textBox = document.getElementById('textBox');  var students = document.getElementById('students');  if(textBox.value == ""){  alert("Enter something!");  return;  }  var studentName = textBox.value.toString();  if(studentName == ""){  return;  }  var studentIndex = parseInt(prompt("Enter postion where you want to insert: "));  studentList.splice(studentIndex - 1, 0, studentName);  students.innerHTML = "";  for(var i = 0; i < studentList.length; i++){  students.innerHTML += studentList[i] + "<br>";  }  }  function addTwoArrays(){  var studentList = ["Sudhanva", "Narayana"];  var girlsList = ["Deepika", "Shreya", "Supriya", "Anjana"];  var finalList = studentList.concat(girlsList);  document.write(studentList.concat(girlsList));  }  function getPartOfArrays(){  var fruits = ["Banana", "Orange", "Lemon", "Apple", "Mango"];  var from = parseInt(prompt("Enter from index: "));  var to = parseInt(prompt("Enter to index: "));  alert(fruits.slice(from, to));  } |

1. Use different text manipulation function and display different outputs with the above Quotes.

You have to dream before your dreams can come true.”

*A. P. J. Abdul Kalam*

Try by yourself and show.