Bahria University,

Karachi Campus



LAB EXPERIMENT NO.

\_\_\_05\_\_\_

LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
| **01** | Using the Shopping List files from the previous videos update the shopping list app to do the following:If you click on the list item, it toggles the .done  class on and off.Add buttons next to each list item to delete the item when clicked on its corresponding delete button.When adding a new list item, it automatically adds the delete button next to it (*hint: be sure to check if new items are clickable too!*) |
| **02** | Write a JavaScript program to calculate the volume of a sphere. |
| **03** | 1. Generate Table: Write a script to generate table, prompt user to enter a number for which the user wants to create a table.  2. Generate Number Sequence: Write a script to generate sequence of numbers, prompt user to enter a limit up to which they want to generate sequence of numbers. For e.g. if user have entered the limit 30, then the sequence of no. will be 0,1,2,3,4........,29,30  3. Calculate power: Write a script to calculate power of a number. Ask user to enter the value of base and exponent. Calculate and display the result. For eg. if base = 2 and power = 3 then result of 2^3=8.  4. Generate Even / Odd No. Sequence: Prompt user to enter their choice for Even No or Odd No and display the results accordingly for the sequence. For e.g. if user enters "E" then it will generate a sequence of even no. i.e. 0,2,4,6,8,10,12,....20 |
| 04 | Create a document with multiple tabs with background color. Upon hover background color of the document is changed accordingly |

Submitted On

30-11-2023

(Date: DD/MM/YY)

**Task 01:** Using the Shopping List files from the previous videos update the shopping list app to do the following:If you click on the list item, it toggles the .done  class on and off.Add buttons next to each list item to delete the item when clicked on its corresponding delete button.When adding a new list item, it automatically adds the delete button next to it (*hint: be sure to check if new items are clickable too!*)

**Solution:**

const text = document.getElementById("text");const addItem = document.getElementById("add-item");const content = document.getElementById("content");addItem.addEventListener("click", () => {const listItemText = text.value.trim();if (listItemText) {const listItem = document.createElement("li");listItem.textContent = listItemText;const deleteBtn = document.createElement("button");deleteBtn.textContent = "Delete";deleteBtn.addEventListener("click", () =>{content.removeChild(listItem);});listItem.appendChild(deleteBtn);content.appendChild(listItem);text.value = "";listItem.style.display = "block";}});<div class="todo"><h1>My To Do List</h1><input type="text" id="text"><button id="add-item">Add</button><div id="content"></div></div>

**Output:**

A computer screen shot of a to do list

Description automatically generated

**Task 02:** Write a JavaScript program to calculate the volume of a sphere.

**Solution:**

<h1>Input Radius value and get the volume of a sphere.</h1><form><label >Radius:</label><input type="number" id="radius-value"> <br> <br><label >Volume:</label><input type="number" id="volume-value"><button id="calculate">Calculate</button></form>

**JavaScript**:

let radiusValue = document.getElementById("radius-value");let volumeValue = document.getElementById("volume-value");let calculate = document.getElementById("calculate");calculate.addEventListener("click", () => {const radius = parseFloat(radiusValue.value);const volume = (4 / 3) \* Math.PI \* Math.pow(radius, 3);volumeValue.value = volume.toFixed(2);})

**Output:**

**Task 03:**Generate Table: Write a script to generate table, prompt user to enter a number for which the user wants to create a table.

2. Generate Number Sequence: Write a script to generate sequence of numbers, prompt user to enter a limit up to which they want to generate sequence of numbers. For e.g. if user have entered the limit 30, then the sequence of no. will be 0,1,2,3,4........,29,30

3. Calculate power: Write a script to calculate power of a number. Ask user to enter the value of base and exponent. Calculate and display the result. For eg. if base = 2 and power = 3 then result of 2^3=8.

4. Generate Even / Odd No. Sequence: Prompt user to enter their choice for Even No or Odd No and display the results accordingly for the sequence. For e.g. if user enters "E" then it will generate a sequence of even no. i.e. 0,2,4,6,8,10,12,....20

**Solution:**

**HTML:**

<input type="button" value="Generate Table" onclick="Table()"><br><br>

<input type="button" value="Calculate Power" onclick="Power()"><br><br>

<input type="button" value="Generate Sequence" onclick="Sequence()"><br><br>

<input type="button" value="Generate Odd/Even No Series" onclick="Even\_Odd()">

**JavaScript:**

function Table(){var num=+prompt("Enter number:")document.write("<h3>Table of "+num+"</h3>")for(var i=1;i<=10;i++){document.write("<p>"+num+"x"+i+"="+(num\*i)+"</p>")}}function Power(){var num=+prompt("Enter number:")var pow=+prompt("Enter Power:")document.write("<h1>Power of number:</h1> "+Math.pow(num,pow))}function Sequence(){document.write("<p><b>Sequence of a number:</b></p>")var num=+prompt("Enter limit: ")for(var i=0;i<num+1;i++){document.write(i+" ")}}function Even\_Odd(){var d=prompt("Select 'E' for Even number series\nSelect 'O' for Odd number series")console.log("Error 1")if(d.toLowerCase()=='e'){var num=+prompt("Enter limit: ")document.write("<h3>Even Series</h3>")for(var i=1;i<=num;i++){if((i%2)==0){document.write(i+" ")}}}else if(d.toLowerCase()=='o'){var num=+prompt("Enter limit: ")document.write("<h3>Odd Series</h3>")for(var i=1;i<=num;i++){if((i%2)==1){document.write(i+" ")}}}}

A blue and white box with a white rectangle

Description automatically generated**Output:**

A blue and white box with a white rectangle

Description automatically generatedA number and number lines

Description automatically generated with medium confidence

A black text on a white background

Description automatically generatedA blue and white box with a rectangle and a rectangle with a blue rectangle

Description automatically generatedA screenshot of a computer

Description automatically generatedA screenshot of a computer

Description automatically generated

A black text on a white background

Description automatically generatedA black text on a white background

Description automatically generated

A number and number lines

Description automatically generated with medium confidence

**Task 04:** Create a document with multiple tabs with background color. Upon hover background color of the document is changed accordingly

**Solution:**

**HTML:**

<div style="text-align: center;">

<button style="background-color:orange;" onmouseover="color('orange')">H</button>

<button style="background-color:red;" onmouseover="color('red')">G</button>

<button style="background-color:green;" onmouseover="color('green')">I</button>

<button style="background-color:blue;" onmouseover="color('blue')">P</button>

<button style="background-color:purple;" onmouseover="color('purple')">L</button></div>

**JavaScript:**

function color(color\_name){

if(color\_name=="orange"){

document.body.style.background=color\_name;}

else if(color\_name=="red"){

document.body.style.background=color\_name;

} else if(color\_name=="green"){

document.body.style.background=color\_name;}

else if(color\_name=="blue"){

document.body.style.background=color\_name;}

else if(color\_name=="purple"){

document.body.style.background=color\_name;}}

**Output:**

A screenshot of a computer

Description automatically generated

A computer screen with a green screen

Description automatically generated