SLIP 2:

Q2) . Write a JavaScript code to calculate maximum, minimum, sum and average of numbers in an array.

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| <html>  <head>  <title>Array Operations</title>  <style>  .input-box { margin-bottom: 10px;  }  </style>  </head>  <body>    <div>  <h2>Array Operations</h2>    <div class="input-box">  <label for="numbersInput">Enter numbers: </label>  <input type="text" id="numbersInput"> </div>    <button onclick="calculateResults()">Calculate</button> <h3>Results:</h3>  <p id="results"></p>  </div>    <script> function calculateResults() { const numbers = document.getElementById('numbersInput').value.split(',').map(Number); const isValidInput = numbers.every(num => !isNaN(num)); if (isValidInput) { const max = Math.max(...numbers); const min = Math.min(...numbers); const sum = numbers.reduce((acc, val) => acc + val, 0); const average = sum / numbers.length; const resultsText = `Array:  [${numbers}]  \nMaximum: ${max}  \nMinimum: ${min}  \nSum: ${sum} |

\nAverage: ${average.toFixed(2)}`; document.getElementById('results').innerText = resultsText; } else { document.getElementById('results').innerText = 'Invalid input.

Please enter valid numbers.';

}

}

</script>

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| <html>  <title>Multiplication Table</title>    <style> table { border-collapse: collapse; width: 10%; margin: 20px 0;  } table, td { border: 1px solid black;  }    td { padding: 5px; text-align: center;  }  </style>  </head>  <body>    <h2>Multiplication Table Generator</h2>    <label for="number">Enter a number:</label>  <input type="number" id="number" min="1">  <button onclick="generateTable()">Generate Table</button> |

</body>

</html>

SLIP 3:

Q2) Write a JavaScript program to display a Multiplication table in tabular format using function

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| <div id="tableContainer"></div>  <script>  function generateTable()  { var number = document.getElementById("number").value; if (isNaN(number) || number < 1)  { alert("Please enter a valid positive number."); return;  } var tableContent = "<table>"; for (var i = 1; i <= 10; i++)  { var product = number \* i;  tableContent += "<tr><td>" + product + "</td></tr>";  } tableContent += "</table>";  document.getElementById("tableContainer").innerHTML = tableContent; }  </script>  </body>  </html> |

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| <!DOCTYPE html>  <html lang="en">  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Email Validation</title>  <style> body {  font-family: Arial, sans-serif; }    #result {  margin-top: 10px; color: green; } |

SLIP 4:

Q2) Write a JavaScript function to validate email-id using regular expression.

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| #error { margin-top: 10px; color: red;  }  </style>  </head>  <body>    <h2>Email Validation</h2>    <label for="email">Enter your email:</label>  <input type="text" id="email">  <button onclick="validateEmail()">Validate Email</button> <div id="result"></div>  <div id="error"></div>    <script>  function validateEmail() { var email = document.getElementById("email").value; var emailRegex = /^[^\s@]+@[^\s@]+\.[^\s@]+$/; if(emailRegex.test(email))  { document.getElementById("result").innerHTML = "Valid email address!"; document.getElementById("error").innerHTML = "";  } else { document.getElementById("result").innerHTML="";  document.getElementById("error").innerHTML = "Invalid email address. Please enter a valid email.";  }  }  </script>    </body>  </html> |

SLIP 5: . Write a JavaScript program to print the reverse of a number.

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| head>  <title>Reverse Number</title>  <style>  Body  { font-family: Arial, sans-serif;  }    #result  { margin-top: 10px;  }  </style> /head> body>    <h2>Reverse Number Program</h2>    <label for="number">Enter a number:</label>  <input type="number" id="number">  <button onclick="reverseNumber()">Reverse Number</button> <div id="result"></div>    <script> function reverseNumber()  { var number = document.getElementById("number").value; if (isNaN(number))  { alert("Please enter a valid number."); return;  } var reversedNumber =  arseInt(number.toString().split('').reverse().join(''));  document.getElementById("result").innerHTML = "Reversed Number: " + reversedNumber; }  </script>    /body>  /html> |

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SLIP 6:

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| <html>  <head>  <title>Number to Words</title>  </head>  <body>  <h2>Number to Words Program</h2>  <label for="number">Enter a number:</label>  <input type="number" id="number">  <button onclick="convertToWords()">Convert to Words</button> <div id="result"></div>    <script> function convertToWords() { var number = document.getElementById("number").value; var words = numberToWords(number); document.getElementById("result").innerHTML = "In Words: " + words;  } function numberToWords(number) {  var units = ["", "One", "Two", "Three", "Four", "Five", "Six", "Seven", "Eight", "Nine"];    var teens = ["", "Eleven", "Twelve", "Thirteen", "Fourteen","Fifteen", "Sixteen",  "Seventeen", "Eighteen", "Nineteen"]; var tens = ["", "Ten", "Twenty", "Thirty", "Forty", "Fifty", "Sixty", "Seventy", "Eighty", "Ninety"];    var digits = number.toString().split('').map(Number).reverse(); var result = "";    for (var i = 0; i < digits.length; i++) { if (i === 0)  result = units[digits[i]] + result; else if (i === 1) result = digits[i] === 1 ? teens[digits[i - 1]] + result : tens[digits[i]] + result; else if (i === 2)  result = units[digits[i]] + " Hundred " + result;  } return result.trim(); } |

Q2) Write a JavaScript program to accept a number from user and display that number in words (e.g. 226 Two Two Six

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| </script> |
| </body>  </html> |

SLIP 7:

Q2) Write a JavaScript program to print factorial of a given number.

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| <html>  <head>  <title>Factorial Calculator</title>  </head>  <body>    <h2>Factorial Calculator</h2>    <label for="number">Enter a number:</label>  <input type="number" id="number">  <button onclick="calculateFactorial()">Calculate Factorial</button>  <div id="result"></div>    <script> const calculateFactorial = () => { const number = parseInt(document.getElementById("number").value); const factorial = (n) => n <= 1 ? 1 : n \* factorial(n - 1); document.getElementById("result").innerHTML = `Factorial of  ${number} is: ${factorial(number)}`;  };  </script>    </body>  </html> |

SLIP 9:

Q2) Write a JavaScript code to greet the user according to the current timing.

<html>

<head>

<title>Greeting based on Time</title>

</head>

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| <body>  <h2>Greeting Program</h2>  <label for="name">Enter your name:</label>  <input type="text" id="name"><br>    <label for="time">Enter the current time (optional, 24-hour format):</label>  <input type="number" id="time" min="0" max="23">    <button onclick="getGreeting()">Get Greeting</button>  <p id="greeting"></p>    <script> function getGreeting() { const userName = document.getElementById("name").value; const userTime = document.getElementById("time").value;  let currentHour;  if (userTime === "") { const currentTime = new Date(); currentHour = currentTime.getHours();  } else { currentHour = parseInt(userTime);  } if (!userName || isNaN(currentHour) || currentHour < 0 || currentHour > 23) { alert("Please enter a valid name and time (0-23)."); return;  }    let greeting;    if (currentHour < 12) {  greeting = `Good morning, ${userName}!`;  } else if (currentHour < 18) {  greeting = `Good afternoon, ${userName}!`;  } else { greeting = `Good evening, ${userName}!`;  }  document.getElementById("greeting").innerHTML = greeting;  }  </script>  </body>  </html> |

SLIP 11:

Q2) 2. Write a menu driven program using JavaScript to find square root, power and absolute value of a given number and validate them.

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| <html>  <head>  <title>Math Operations</title>  </head>  <body>    <h2>Math Operations</h2>    <label for="number">Enter a number:</label>  <input type="text" id="number">    <label for="operation">Select an operation:</label>  <select id="operation">  <option value="sqrt">Square Root</option>  <option value="power">Power</option>  <option value="absolute">Absolute Value</option>  </select>    <button onclick="performOperation()">Perform Operation</button>  <p id="result"></p>    <script> function performOperation() { const numberInput = document.getElementById("number").value; const operation = document.getElementById("operation").value;  if (!isValidNumber(numberInput)) { alert("Please enter a valid number."); return;  }  const number = parseFloat(numberInput);  let result; switch (operation) { case "sqrt": result = Math.sqrt(number); break; case "power":  result = Math.pow(number, 2); // You can modify the power value as needed |
| break; case "absolute":  result = Math.abs(number); break; default:  alert("Invalid operation selected."); return;  }  document.getElementById("result").innerHTML = `Result: ${result}`; }  function isValidNumber(input) { return !isNaN(parseFloat(input)) && isFinite(input); }  </script>    </body>  </html> |

SLIP 12:

Q2) Write a JavaScript Program to read a number from user, store its factors into the array and display that array

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| <html>  <head>  <title>Factor Array</title>  </head>  <body>    <h2>Factor Array Program</h2>    <label for="number">Enter a number:</label>  <input type="number" id="number">  <button onclick="generateFactorArray()">Generate Factor Array</button>  <p id="result"></p>    <script> function generateFactorArray() { const number = parseInt(document.getElementById("number").value); |

const factors = Array.from({ length: number }, (\_, i) => i +

1).filter(n => number % n === 0); document.getElementById("result").innerHTML = `Factors:

${factors.join(", ")}`;

}

</script>

</body>

</html>