**JS Exercises**

**Exercise 1**

Write a JavaScript program to display the current day and time in the following format.

Sample Output : Today is : Tuesday.

Current time is : 10 PM : 30 : 38

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| **HTML** |
| <!DOCTYPE html>  <html lang="en">    <head>      <meta charset="UTF-8" />      <meta http-equiv="X-UA-Compatible" content="IE=edge" />      <meta name="viewport" content="width=device-width, initial-scale=1.0" />      <title>Javascript - Exercise 1</title>    </head>    <body>      <h1>Current Day and Time</h1>      <p>Today is: <span class="day"></span></p>      <p>Current time is: <span class="time"></span></p>      <script src="index.js"></script>    </body>  </html> |
| **JavaScript** |
| var d = new Date(); //Creates a Date object d, storing toda's date and time in it: d(year, month, day, hours, minutes, seconds, milliseconds)  var day = d.getDay(); //Extracts the day from the d object  var hours = d.getHours() //Extracts the hours from the d object  var minutes = d.getMinutes() //Extracts the minutes from the d object  var seconds = d.getSeconds() //Extracts the seconds from the d object  // Turning "day" into an actual day of the week and not just a number  var dayOfTheWeek = ["Sunday","Monday","Tuesday","Wednesday","Thursday","Friday","Saturday"];  var currentDayOfTheWeek = dayOfTheWeek[day];  // Adding the day to the innerHTML  document.querySelector(".day").innerHTML=currentDayOfTheWeek;  // Keeping the 12 hour format and adding AM or PM  var partOfDay;  if (hours<12) {      hours = hours + " AM"  }  else {      (hours>12)      hours = hours - 12 + " PM"  }  // Adding the time to the innerHTML  document.querySelector(".time").innerHTML = hours + " : " + minutes + " : " + seconds; |
| **Result** |
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**Exercise 2**

Write a JavaScript program to print the contents of the current window.

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| **HTML** |
| <!DOCTYPE html>  <!DOCTYPE html>  <html lang="en">    <head>      <meta charset="UTF-8" />      <meta http-equiv="X-UA-Compatible" content="IE=edge" />      <meta name="viewport" content="width=device-width, initial-scale=1.0" />      <title>JavaScript - Exercise 2</title>      <link rel="stylesheet" href="styles.css" />    </head>    <body>      <button>Print this page</button>      <script src="index.js"></script>    </body>  </html> |
| **JavaScript** |
| document.querySelector("button").addEventListener("click",() => window.print()) |
| **Result** |
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**Exercise 3**

Write a JavaScript program to get the current date.

Expected Output : *dd/mm/yyyy*

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| **HTML** |
| <!DOCTYPE html>  <html lang="en">    <head>      <meta charset="UTF-8" />      <meta http-equiv="X-UA-Compatible" content="IE=edge" />      <meta name="viewport" content="width=device-width, initial-scale=1.0" />      <title>JavaScript - Exercise 3</title>    </head>    <body>      <p class="date"></p>      <script src="index.js"></script>    </body>  </html> |
| **JavaScript** |
| var d = new Date();  var day = d.getDate();  var month = d.getMonth() + 1;  var year = d.getFullYear();  if (day<10) {      day = "0" + day;  }  if (month<10) {      month = "0" + month;  }  document.querySelector(".date").innerHTML = day + "/" + month + "/" + year; |
| **Result** |
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**Exercise 4**

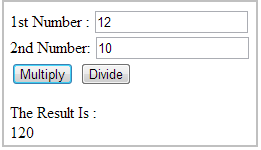
Write a JavaScript program where the program takes a random integer between 1 to 10, the user is then prompted to input a guess number. If the user input matches with guess number, the program will display a message "Good Work" otherwise display a message "Not matched".

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| **HTML** |
| <!DOCTYPE html>  <html lang="en">    <head>      <meta charset="UTF-8" />      <meta http-equiv="X-UA-Compatible" content="IE=edge" />      <meta name="viewport" content="width=device-width, initial-scale=1.0" />      <title>JavaScript - Exercise 4</title>    </head>    <body>      <p>        Enter a number between 1 and 10:        <span><input type="text" name="text" id="inputNumber" placeholder="Enter Number" /></span>      </p>      <p>Your guessed number was: <span class="guess"></span></p>      <p>The generated random number is: <span class="randomNumber"></span></p>      <p>Result: <span class="result"></span></p>      <script src="index.js"></script>    </body>  </html> |
| **JavaScript** |
| document.querySelector("#inputNumber").addEventListener("change", function() {      var inputNumber = document.querySelector("#inputNumber").value;      var randomNumber = Math.ceil(Math.random()\*10);      if (inputNumber <= 10) {      document.querySelector(".guess").innerHTML = inputNumber;      document.querySelector(".randomNumber").innerHTML = randomNumber;          if (inputNumber==randomNumber) {              document.querySelector(".result").innerHTML = "Good Work";          }          else {              document.querySelector(".result").innerHTML = "Not Matched";          }      } else {          alert("Number must be between 1 and 10!");      }  }) |
| **Result** |
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**Exercise 5**

Write a JavaScript program to calculate multiplication and division of two numbers (input from user).

Sample form :



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| **HTML** |
| <!DOCTYPE html>  <html lang="en">    <head>      <meta charset="UTF-8" />      <meta http-equiv="X-UA-Compatible" content="IE=edge" />      <meta name="viewport" content="width=device-width, initial-scale=1.0" />      <title>Document</title>    </head>    <body>      <div class="box">        <p>          First Number :          <span><input type="text" id="firstNumber" placeholder="Enter Number" /></span>        </p>        <p>          Second Number :          <span><input type="text" id="secondNumber" placeholder="Enter Number" /></span>        </p>        <input type="button" value="multiply" name="button" id="multiply" />        <input type="button" value="divide" name="button" id="divide" />        <p>The Result Is :</p>        <p class="result"></p>      </div>      <script src="index.js"></script>    </body>  </html> |
| **JavaScript** |
| var numberOfButtons = document.getElementsByName("button").length;  for (i = 0; i < numberOfButtons ; i++) {      document.getElementsByName("button")[i].addEventListener("click",calculation)  }  function calculation(firstNumber,secondNumber) {      var buttonPressed = this.id;      var firstNumber = document.querySelector("#firstNumber").value;      var secondNumber = document.querySelector("#secondNumber").value;      switch (buttonPressed) {          case "multiply":              var result = firstNumber \* secondNumber;              document.querySelector(".result").innerHTML = result;              break;          case "divide":              var result = firstNumber / secondNumber;              document.querySelector(".result").innerHTML = result;              break;          default:              break;      }  } |
| **Result** |
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**Exercise 6**

Write a JavaScript function that reverse any number. The user needs to input the number and click a button to reverse it.

Example x = 32243;

Expected Output : 34223

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| **HTML** |
| <!DOCTYPE html>  <html lang="en">    <head>      <meta charset="UTF-8" />      <meta http-equiv="X-UA-Compatible" content="IE=edge" />      <meta name="viewport" content="width=device-width, initial-scale=1.0" />      <title>Document</title>    </head>    <body>      <p>        Original Number: <span> <input type="text" id="originalNumber" placeholder="Enter Number" /> </span>      </p>      <button>Click to Reverse</button>      <p>Reversed Number: <span class="reversedNumber"></span></p>      <script src="index.js"></script>    </body>  </html> |
| **JavaScript** |
| document.querySelector("button").addEventListener('click', () => {      var originalNumber = document.querySelector("#originalNumber").value;      originalNumber = originalNumber + ""; // Converts number to string      var reversedNumber = originalNumber.split("").reverse().join("");      document.querySelector(".reversedNumber").innerHTML = Number(reversedNumber);  }); |
| **Result** |
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**Exercise 7**

Write a JavaScript function that accepts a string as a parameter and find the longest word within the string.

It should have a text input field and the biggest word should pop as soon the input field is changed.

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| **HTML** |
| <!DOCTYPE html>  <html lang="en">    <head>      <meta charset="UTF-8" />      <meta http-equiv="X-UA-Compatible" content="IE=edge" />      <meta name="viewport" content="width=device-width, initial-scale=1.0" />      <title>Document</title>    </head>    <body>      <p>        Text: <span><input type="text" id="text" placeholder="Enter Text" /></span>      </p>      <p>Biggest word in the text: <span class="biggestWord"></span></p>      <script src="index.js"></script>    </body>  </html> |
| **JavaScript** |
| document.querySelector("#text").addEventListener("change", () => {      var inputText = document.querySelector("#text").value;      var textArray = inputText.split(" ");      var biggestWord = textArray[0];      for (var i=1; i<textArray.length; i++) {          if (textArray[i].length > textArray[i-1].length) {              biggestWord = textArray[i];          }      }      document.querySelector(".biggestWord").innerHTML = biggestWord;  }) |
| **Result** |
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**Exercise 8**

Write a JavaScript program to create a new array taking the middle elements of the two arrays of integer and each length 3.

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| **HTML** |
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| **JavaScript** |
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| **Result** |
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