|  |
| --- |
| <!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | const n = parseInt(prompt("Enter a Number")); |
|  | let sum = n\*(n+1)/2; |
|  | document.write(sum); |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 2. |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | const n = parseInt(prompt("Enter a Number")); |
|  | var sum=0; |
|  | for(let i=1; i<=n; i++) |
|  | { |
|  | if((i%3==0) || (i%5==0)) |
|  | { |
|  | var sum = sum+i; |
|  | } |
|  | } |
|  | document.write(sum); |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 3.<!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | function returnOddEven(n) |
|  | { |
|  | if(n%2==0) |
|  | { |
|  | return "even" |
|  | } |
|  | else |
|  | { |
|  | return "odd" |
|  | } |
|  | } |
|  | var n = parseInt(prompt("Enter a number: ")); |
|  | document.write(returnOddEven(n)) |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 4.<!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | function coinFlip(n) |
|  | { |
|  | var heads = 0; |
|  | const array = Array(n) |
|  | .fill() |
|  | .map(() => 10 \* Math.random()); |
|  | for(let i=0; i<array.length; i++) |
|  | { |
|  | if(array[i]<0.95) |
|  | { |
|  | array[i] = 0; |
|  | } |
|  | else if(array[i]>0.94) |
|  | { |
|  | array[i] = 1; |
|  | } |
|  | if(array[i] == 1) |
|  | { |
|  | heads = heads+1; |
|  | } |
|  | } |
|  | return heads/n; |
|  | } |
|  | var n = parseInt(prompt("Enter a number: ")) |
|  | document.write(coinFlip(n)) |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 5. |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | var year = prompt("please input a year to find out the next 20 years"); |
|  | var counter = 20; |
|  | var result=true; |
|  | document.write(leapyear(year,counter,result)); |
|  | function leapyear(year, counter, result) |
|  | { |
|  | while (counter >= 0) |
|  | { |
|  | if ((year % 4 === 0) && (year % 100 !== 0)||(year % 400 === 0)) |
|  | { |
|  | result = true; |
|  | document.write(year+"\n"); |
|  | year++; |
|  | counter--; |
|  | } |
|  | else |
|  | { |
|  | year++; |
|  | } |
|  | } |
|  | } |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 6. |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | var listStrings = ["Hello","World","in","a","Frame"]; |
|  | document.write("\*\*\*\*\*\*\*\*"+"<br>") |
|  | for(let i=0; i<listStrings.length; i++) |
|  | { |
|  | document.write("\* "+listStrings[i]+" \*"+"<br>") |
|  | } |
|  | document.write("\*\*\*\*\*\*\*\*") |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 7. |
|  |  |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | var dollar = parseInt(prompt("Enter an amount in dollar: ")); |
|  | var inr = dollar\*75.08; |
|  | var yen = dollar\*115.09; |
|  | var euro = dollar\*0.89; |
|  | var pound = dollar\*0.75; |
|  | document.write(inr+" INR<br>"+yen+" Yen<br>"+euro+" Euro<br>"+pound+" Pounds"); |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 8. |
|  |  |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | const arr1 = [1,2,3]; |
|  | const arr2 = ['a','b','c']; |
|  | document.write(arr1.concat(arr2)); |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 9. |
|  |  |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | let arr1 = [1,2,3]; |
|  | let arr2 = ['a','b','c']; |
|  |  |
|  | var alternateList = function(arr1,arr2) |
|  | { |
|  | let lengthList = arr1.length + arr2.length; |
|  | let emptyArray = []; |
|  | let j=0,k=0; |
|  | for(let i=0; i<lengthList; i++) { |
|  | if(i%2==0) { |
|  | emptyArray[i]=arr1[j++]; |
|  | } else { |
|  | emptyArray[i]=arr2[k++]; |
|  | } |
|  | } |
|  | return emptyArray; |
|  | } |
|  | document.write(alternateList(arr1,arr2)); |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 10. |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | const number = parseInt(prompt('Enter the number of elements: ')); |
|  | let n1 = 0, n2 = 1, next; |
|  | for (let i = 1; i <= number; i++) { |
|  | document.write(n1 + "<br>") |
|  | next = n1 + n2; |
|  | n1 = n2; |
|  | n2 = next; |
|  | } |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 11. |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | const array = Array(5) |
|  | .fill() |
|  | .map(() => 10 \* Math.random()); |
|  | document.write("Original : "+ array + "<br>"); |
|  | document.write("Reverse : "+ array.reverse()); |
|  | </script> |
|  | </body> |
|  | </html> |
|  | 12. |
|  |  |
|  |  |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | function maxRepeating(str) |
|  | { |
|  | let len = str.length; |
|  | let count = 0; |
|  | let res = str[0]; |
|  | for (let i=0; i<len; i++) |
|  | { |
|  | let cur\_count = 1; |
|  | for (let j=i+1; j<len; j++) |
|  | { |
|  | if (str[i] != str[j]) |
|  | break; |
|  | cur\_count++; |
|  | } |
|  | if (cur\_count > count) |
|  | { |
|  | count = cur\_count; |
|  | res = str[i]; |
|  | } |
|  | } |
|  | return res; |
|  | } |
|  | let str = "ujhffftrttttppoooo"; |
|  | document.write(maxRepeating(str)); |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 13. |
|  |  |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | var arr = [1,2,3,4,5]; |
|  | var n = parseInt(prompt("Option 1: for loop \nOption 2: while loop \nOption 3: do while loop\n\nEnter an option")); |
|  | switch(n) |
|  | { |
|  | case 1: |
|  | //using for loop |
|  | var sum1 = 0; |
|  | for(let i=0;i<arr.length;i++) |
|  | { |
|  | sum1 = sum1 + arr[i]; |
|  | } |
|  | document.write("Using for loop: "+sum1); |
|  | break; |
|  |  |
|  | case 2: |
|  | //using while loop |
|  | var sum2 = 0; |
|  | let i = 0; |
|  | while(i<arr.length) |
|  | { |
|  | sum2 = sum2 + arr[i]; |
|  | i++; |
|  | } |
|  | document.write("Using while loop: "+sum2); |
|  | break; |
|  |  |
|  | case 3: |
|  | //using do while loop |
|  | var sum3 = 0; |
|  | let j = 0; |
|  | do{ |
|  | sum3 = sum3 + arr[j]; |
|  | j++; |
|  | } |
|  | while(j<arr.length); |
|  | document.write("Using do while loop: "+sum3); |
|  | break; |
|  | } |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 14. |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | var arr = []; |
|  | while(arr.length < 100) |
|  | { |
|  | var r = Math.floor(Math.random() \* 200) + 1; |
|  | if(arr.indexOf(r) === -1) arr.push(r); |
|  | } |
|  | //the array is printed as follows |
|  | document.write(arr); |
|  |  |
|  | //maximum of the array |
|  | var maximum = Math.max.apply(null,arr); |
|  | document.write("<br>Maximum number in the array is: ",maximum); |
|  |  |
|  | //minimum of the array |
|  | var minimum = Math.min.apply(null,arr); |
|  | document.write("<br>Minimum number in the array is: ", minimum); |
|  |  |
|  | //odd and even count comparision |
|  | var even\_count = 0; |
|  | var odd\_count = 0; |
|  | for(let i=0;i<arr.length;i++) |
|  | { |
|  | if(arr[i]%2 == 0) |
|  | { |
|  | even\_count++; |
|  | } |
|  | else if(arr[i]%2!=0) |
|  | { |
|  | odd\_count++; |
|  | } |
|  | } |
|  | if(odd\_count>even\_count) |
|  | { |
|  | document.write("<br>Odd count is more<br>Odd count: "+odd\_count+"<br>Even Count: "+even\_count) |
|  | } |
|  | else if(odd\_count==even\_count) |
|  | { |
|  | document.write("<br>Both are equal<br>Odd count: "+odd\_count+"<br>Even Count: "+even\_count) |
|  | } |
|  | else |
|  | { |
|  | document.write("<br>Even count is more<br><br>Odd count: "+odd\_count+"<br>Even Count: "+even\_count) |
|  | } |
|  |  |
|  | //sum and average |
|  | var sum = 0; |
|  | for(let i=0;i<arr.length;i++) |
|  | { |
|  | sum = sum + arr[i]; |
|  | } |
|  | document.write("<br>Sum is: "+sum+ " and the average is: "+sum/arr.length); |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 15.<!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | var arr = []; |
|  | while(arr.length < 20) |
|  | { |
|  | var r = Math.floor(Math.random() \* 30) + 1; |
|  | if(arr.indexOf(r) === -1) arr.push(r); |
|  | } |
|  | //the array is printed as follows |
|  | document.write(arr+"<br>"); |
|  |  |
|  | //bubble sort |
|  | for(var i = 0; i < arr.length; i++) |
|  | { |
|  | for(var j = 0; j < (arr.length - i -1); j++) |
|  | { |
|  | if(arr[j] > arr[j+1]) |
|  | { |
|  | var temp = arr[j]; |
|  | arr[j] = arr[j + 1]; |
|  | arr[j+1] = temp; |
|  | } |
|  | } |
|  | } |
|  | document.write(arr); |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 16. |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <head> |
|  | <style type="text/css"> |
|  | body {margin: 30px;} |
|  | </style> |
|  | </head> |
|  | <body> |
|  | <script> |
|  | function createTable() |
|  | { |
|  | rn = window.prompt("Input number of rows", 1); |
|  | cn = window.prompt("Input number of columns",1); |
|  |  |
|  | for(var r=0;r<parseInt(rn,10);r++) |
|  | { |
|  | var x=document.getElementById('myTable').insertRow(r); |
|  | for(var c=0;c<parseInt(cn,10);c++) |
|  | { |
|  | var y= x.insertCell(c); |
|  | y.innerHTML="Row-"+r+" Column-"+c; |
|  | } |
|  | } |
|  | } |
|  | </script> |
|  | <table id="myTable" border="1"></table> |
|  | <form> |
|  | <input type="button" onclick="createTable()" value="Create the table"> |
|  | </form> |
|  | </body> |
|  | </html> |
|  |  |
|  | 17. |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | function leftRotate(arr , d , n) |
|  | { |
|  | for (i = 0; i < d; i++) |
|  | leftRotatebyOne(arr, n); |
|  | } |
|  | function leftRotatebyOne(arr , n) { |
|  | var i, temp; |
|  | temp = arr[0]; |
|  | for (i = 0; i < n - 1; i++) |
|  | arr[i] = arr[i + 1]; |
|  | arr[n - 1] = temp; |
|  | } |
|  | function printArray(arr , n) { |
|  | for (i = 0; i < n; i++) |
|  | document.write(arr[i] + " "); |
|  | } |
|  | var arr = [1,2,3,4,5]; |
|  | leftRotate(arr,2,5); |
|  | printArray(arr,5); |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 18. |
|  |  |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <script> |
|  | const pigLatinSentence = (s) => { |
|  | let ans = ""; |
|  | for (let i = 0; i < s.length; i++) { |
|  | let j = i; |
|  | if (i >= s.length) |
|  | break; |
|  | while (i < s.length && s.charAt(i) != ' ') |
|  | i++; |
|  | if (ans.length === 0) { |
|  | ans = ans + s.substring(j + 1, i) + s.charAt(j) + "ay"; |
|  | } |
|  | else { |
|  | ans = ans + " " + s.substring(j + 1, i) + s.charAt(j) + "ay"; |
|  | } |
|  | } |
|  | return ans; |
|  | } |
|  | let s = "the quick brown fox"; |
|  | document.write(pigLatinSentence(s)); |
|  | </script> |
|  | </body> |
|  | </html> |
|  |  |
|  | 19. |
|  |  |
|  | <!DOCTYPE html> |
|  | <html> |
|  | <body> |
|  | <form name = "form1"> |
|  |  |
|  | <input id = "calc" type ="text" name = "answer"> <br> <br> |
|  |  |
|  | <input type = "button" value = "1" onclick = "form1.answer.value += '1' "> |
|  | <input type = "button" value = "2" onclick = "form1.answer.value += '2' "> |
|  | <input type = "button" value = "3" onclick = "form1.answer.value += '3' "> |
|  | <input type = "button" value = "+" onclick = "form1.answer.value += '+' "> |
|  | <br> <br> |
|  |  |
|  | <input type = "button" value = "4" onclick = "form1.answer.value += '4' "> |
|  | <input type = "button" value = "5" onclick = "form1.answer.value += '5' "> |
|  | <input type = "button" value = "6" onclick = "form1.answer.value += '6' "> |
|  | <input type = "button" value = "-" onclick = "form1.answer.value += '-' "> |
|  | <br> <br> |
|  |  |
|  | <input type = "button" value = "7" onclick = "form1.answer.value += '7' "> |
|  | <input type = "button" value = "8" onclick = "form1.answer.value += '8' "> |
|  | <input type = "button" value = "9" onclick = "form1.answer.value += '9' "> |
|  | <input type = "button" value = "\*" onclick = "form1.answer.value += '\*' "> |
|  | <br> <br> |
|  |  |
|  |  |
|  | <input type = "button" value = "/" onclick = "form1.answer.value += '/' "> |
|  | <input type = "button" value = "0" onclick = "form1.answer.value += '0' "> |
|  | <input type = "button" value = "." onclick = "form1.answer.value += '.' "> |
|  | <input type = "button" value = "=" onclick = "form1.answer.value = eval(form1.answer.value) "> |
|  | <br> |
|  |  |
|  | </form> |
|  | </body> |
|  | </html> |