Do the below programs in anonymous function & IIFE

* 1. Print odd numbers in an array

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|  |
|  | **anonymous :**  function(array){ |
|  | for(var i = 0 ; i< array.length ; i++){ |
|  | if(array[i]%2!=0){ |
|  | console.log(array[i]) |
|  | } |
|  | } |
|  | } |
|  | **IIFE** :  (function(array){ |
|  | for(var i = 0 ; i< array.length ; i++){ |
|  | if(array[i]%2!=0){ |
|  | console.log(array[i]) |
|  | } |
|  | } |
|  | })([1,2,3,4]) |
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|  | 2)Convert all the strings to title caps in a string array |
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|  | **anonymous :**  function (str) { |
|  | str = str.toLowerCase().split(' '); |
|  | for (var i = 0; i < str.length; i++) { |
|  | str[i] = str[i].charAt(0).toUpperCase() + str[i].slice(1); |
|  | } |
|  | return str.join(' '); |
|  | } |
|  | **IIFE :**  (function (str) { |
|  | str = str.toLowerCase().split(' '); |
|  | for (var i = 0; i < str.length; i++) { |
|  | str[i] = str[i].charAt(0).toUpperCase() + str[i].slice(1); |
|  | } |
|  | return str.join(' '); |
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|  | 3)Sum of all numbers in an array |
|  | **anonymous :**  function(array){ |
|  | var sum = 0; |
|  | for(var i = 0 ; i< array.length ; i++){ |
|  | sum = sum + array[i]; |
|  | } |
|  | return sum; |
|  | } |
|  | **IIFE :**  (function(array){ |
|  | var sum = 0; |
|  | for(var i = 0 ; i< array.length ; i++){ |
|  | sum = sum + array[i]; |
|  | } |
|  | return sum; |
|  | })([1,2,3,4]) |
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|  | 4)Return all the prime numbers in an array |
|  | **Anonymous Function:** |
|  | function(numArray){ |
|  | numArray = numArray.filter((number) => { |
|  | for (var i = 2; i <= Math.sqrt(number); i++) { |
|  | if (number % i === 0) return false; |
|  | } |
|  | return true; |
|  | }); |
|  | console.log(numArray); |
|  | } |
|  | **IIFE :** |
|  | ( |
|  | function(numArray){ |
|  | numArray = numArray.filter((number) => { |
|  | for (var i = 2; i <= Math.sqrt(number); i++) { |
|  | if (number % i === 0) return false; |
|  | } |
|  | return true; |
|  | }); |
|  | console.log(numArray); |
|  | })([1,2,3,4]) |
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|  | 5) Return all the palindromes in an array |
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|  | function isPalindrome(N) |
|  | { |
|  | let str = "" + N; |
|  | let len = str.length; |
|  | for (let i = 0; i < parseInt(len / 2, 10); i++) |
|  | { |
|  | if (str[i] != str[len - 1 - i ]) |
|  | return false; |
|  | } |
|  | return true; |
|  | } |
|  |  |
|  | **Anonymous Function :**  function (arr, n) |
|  | { |
|  | // Traversing each element of the array |
|  | // and check if it is palindrome or not |
|  | for (let i = 0; i < n; i++) |
|  | { |
|  | let ans = isPalindrome(arr[i]); |
|  | if (ans == false) |
|  | return false; |
|  | } |
|  | return true; |
|  | } |
|  |  |
|  | **IIFE :** |
|  |  |
|  | ( function (arr, n) |
|  | { |
|  | // Traversing each element of the array |
|  | // and check if it is palindrome or not |
|  | for (let i = 0; i < n; i++) |
|  | { |
|  | let ans = isPalindrome(arr[i]); |
|  | if (ans == false) |
|  | return false; |
|  | } |
|  | return true; |
|  | })([1,2,3] , 3) |
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|  | 6.Remove duplicates from an Array |
|  | **Anonymous Function** :  function(array){ |
|  | let dup = [...new Set(array)]; |
|  | console.log(dup); |
|  | } |
|  | **IIFE :**  (function(array){ |
|  | let dup = [...new Set(array)]; |
|  | console.log(dup); |
|  | })([1,1,2,3,4]) |
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|  | 7.Rotate an array by K times |
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|  | function reverse(array , li , ri){ |
|  | while(li < ri){ |
|  | int temp = a[li]; |
|  | a[li]= a[ri]; |
|  | a[ri] = temp; |
|  |  |
|  | li++; |
|  | ri--; |
|  | } |
|  | } |
|  | **Anonymous function :**  function(array , k){ |
|  | k = k % a.length; |
|  | if(k < 0){ |
|  | k += a.length; |
|  | } |
|  |  |
|  | reverse(a, 0, a.length - k - 1); |
|  | reverse(a, a.length - k, a.length - 1); |
|  | reverse(a, 0, a.length - 1); |
|  | } |
|  |  |
|  | **IIFE :**  (function(array , k){ |
|  | k = k % a.length; |
|  | if(k < 0){ |
|  | k += a.length; |
|  | } |
|  |  |
|  | reverse(a, 0, a.length - k - 1); |
|  | reverse(a, a.length - k, a.length - 1); |
|  | reverse(a, 0, a.length - 1); |
|  | })([1,2,3,4] , 2) |
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Do the below programs in arrow functions.

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| * 1. Print odd numbers in an array |
| **Arrow Function**  oddNumbers = (array) => { |
| for(var i = 0 ; i< array.length ; i++){ |
| if(array[i]%2!=0){ |
| console.log(array[i]) |
| } |
| } |
| } |

2.Convert all the strings to title caps in a string array

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|  | **Arrow Function** :  titleCase = (str) => { |
|  | str = str.toLowerCase().split(' '); |
|  | for (var i = 0; i < str.length; i++) { |
|  | str[i] = str[i].charAt(0).toUpperCase() + str[i].slice(1); |
|  | } |
|  | return str.join(' '); |
|  | } |

3.Sum of all numbers in an array

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| **Arrow function:**  sum = (array)=>{ |
| var sum = 0; |
| for(var i = 0 ; i< array.length ; i++){ |
| sum = sum + array[i]; |
| } |
| return sum; |
| } |

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|  | 4)Return all the prime numbers in an array |

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| **Arrow Function :** |
|  |
| primeNumber = (numArray) => { |
| numArray = numArray.filter((number) => { |
| for (var i = 2; i <= Math.sqrt(number); i++) { |
| if (number % i === 0) return false; |
| } |
| return true; |
| }); |
| console.log(numArray); |
| } |

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5.Return all the palindromes in an array

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| **Arrow function:** |
| Palindrome = (arr, n) => |
| { |
| // Traversing each element of the array |
| // and check if it is palindrome or not |
| for (let i = 0; i < n; i++) |
| { |
| let ans = isPalindrome(arr[i]); |
| if (ans == false) |
| return false; |
| } |
| return true; |
| } |

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