**Using Anonymous Function:**

**Do the below Program in anonymous function:**

**1.Print odd number in an array.**

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

**3.Sum of all numbers in an array.**

**4.Return all the prime numbers in an array.**

**5.Return all the palindromes in an array.**

**6.Return median of two sorted arrays of same size.**

**7.Remove duplicates from an array.**

**8.Rotate an array by k times and return the rotated array.**

**1.Print odd number in an array.**

**Answer:**

**const arr = [1,2,3,4,5,6,7,8,9,10];**

**const odd = function (values)**

**{**

**return values % 2 ;**

**}**

**console.log(arr.filter(odd));**

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

**Answer:**

***var array =["good morning"]***

***var titleCase = function (str) {***

***return str.toLowerCase().split(' ').map(function(word) {***

***return (word.charAt(0).toUpperCase() + word.slice(1));***

***}).join(' ');***

***}***

***console.log(array.map(titleCase));***

***(or)***

**var array = ["hello","guvi","hai","sangeetha"];**

**var titleCase = function (str){**

**return str.toLowerCase().split(' ').map(function(word){**

**return (word.charAt(0).toUpperCase() + word.slice(1));**

**}).join(' ');**

**}**

**console.log(array.map(titleCase));**

**3.Sum of all numbers in an array.**

**Answer:**

***var* arr =[10,10,10];**

***var* res = 0;**

***var* sum = *function*()**

**{**

**for(*var* i=0;i<arr.length;i++)**

**{**

**res += parseInt(arr[i]);**

**}**

**console.log(res);**

**}**

**sum();**

**(or)**

**const arr = [10,10,10];**

**const add = function(total,num)**

**{**

**return total + num;**

**}**

**console.log(arr.reduce(add,0));**

**4.Return all the prime numbers in an array.**

**Answer:**

***var numArray = [2, 3, 4, 5, 6, 7, 8, 9, 10];***

***var prime = function(number)***

***{***

***for (var i = 2; i <= Math.sqrt(number); i++) {***

***if (number % i === 0) return false;***

***}***

***return true;***

***}***

***console.log(numArray.filter(prime));***

**5.Return all the palindromes in an array.**

**Answer:**

***var array\_words =["hello","madam","did","this","refer","mom","dad"];***

***//function that checks if palindrome or not***

***var checkPalindrom = function (str)***

***{***

***return str == str.split('').reverse().join('');***

***}***

***//filter function that filters array to only keep palindromes***

***const result = array\_words.filter(checkPalindrom);***

***console.log(result);***

**6.Return median of two sorted arrays of same size.**

**Answer:**

**let a = ["Saturday","Monday","Tuesday"];**

**let b = ["Wednesday","Thursday","Friday"];**

**var box =[];**

**var mediansort = function(x,y)**

**{**

**if(x.length === y.length)**

**{**

**x=x.sort();**

**y=y.sort();**

**var arr = x.concat(y);**

**let median = arr[(arr.length/2)-1]+ ", " +arr[((arr.length/2))];**

**box.push(median)**

**}else{**

**console.log("invalid input");**

**}**

**return box;**

**}**

**console.log(mediansort(a,b));**

**7.Remove duplicates from an array.**

**Answer:**

**let Arrays = [ "sangeetha", 1, 5, 1, "sangeetha", "guvi", "Hello","guvi" ];**

**let findDuplicates = function(array)**

**{**

**let removeDuplicates = new Set(array);**

**let uniqueArray = [ ...removeDuplicates ];**

**return uniqueArray;**

**}**

**// result => ["sangeetha", 1, 5, "guvi", "Hello"]**

**console.log("Original Array values:",Arrays);**

**console.log("Duplicates Array values:",findDuplicates(Arrays));**

**8.Rotate an array by k times and return the rotated array.**

**Answer:**

**var array = [1,2,3,4,5];**

**var rotate\_fun = function(x , k)**

**{**

**for (var i=0; i<k; i++)**

**{**

**x.unshift(x.pop())**

**}**

**return x;**

**}**

**console.log(rotate\_fun(array,1));**