Day 5

1. Do the below programs in anonymous function & IIFE
   1. Print odd numbers in an array

Anonymous:

var arr=[1,2,3,4,5,6,7,8,9];

var compute=function(arr){

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

if(arr[i]%2!==0){

console.log(arr[i]);

}

}

};

compute(arr);

IIFE:

var arr=[1,2,3,4,5,6,7,8,9];

var compute=(function(arr){

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

if(arr[i]%2!==0){

console.log(arr[i]);

}

}

});

compute(arr);

output :

13579

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

Anonymous:

function titleCase(str) {

return str

.split(' ')

.map((word) => word.toUpperCase())

.join(' ');

}

console.log(titleCase("i'm sabari\_gv"));

IIFE:

(function(){

function titleCase(str) {

return str

.split(' ')

.map((word) => word.toUpperCase())

.join(' ');

}

console.log(titleCase("i'm sabari\_gv"));

})();

Output:

I'M SABARI\_GV

C. Sum of all numbers in an array

Anonymous:

var arr=[6,8,5,1,4];

function sum(arr){

var sum = 0;

for (let i = 0; i < arr.length; i++) {

sum += arr[i];

}

return sum;

}

console.log(sum(arr));

IIFE:

(function(){

var arr=[6,8,5,1,4];

function sum(arr){

var sum = 0;

for (let i = 0; i < arr.length; i++) {

sum += arr[i];

}

return sum;

}

console.log(sum(arr));

})();

Output:

24

D. Return all the prime numbers in an array

Anonymous:

var number=[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20];

let temp = [];

function checkPrime(number) {

for (let i = 2; i < number.length; i++) {

if (number[i] % 2 !== 0 && number[i] % 3 !== 0) {

temp.push(number[i]);

}

}

return temp;

}

console.log(checkPrime(number));

IIFE:

(function(){

var number=[1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20];

let temp = [];

function checkPrime(number) {

for (let i = 2; i < number.length; i++) {

if (number[i] % 2 !== 0 && number[i] % 3 !== 0) {

temp.push(number[i]);

}

}

return temp;

}

console.log(checkPrime(number));

})();

Output:

[ 5, 7, 11, 13, 17, 19 ]

E. Return all the palindromes in an array

Anonymous:

const arr = ['bob', 1344, 12321, 'did', 'sabari'];

const isPalindrome = el => {

const str = String(el);

let i = 0;

let j = str.length - 1;

while(i < j) {

if(str[i] === str[j]) {

i++;

j--;

}

else {

return false;

}

}

return true;

};

const findPalindrome = arr => {

return arr.filter(el => isPalindrome(el));

};

console.log(findPalindrome(arr));

output:

[ 'bob', 12321, 'did' ]

1. Do the below programs in arrow functions

A. Print odd numbers in an array

let arr = [1,2,3,4,5,6,7,8,9,10,11,12];

let odds = arr.filter(n => n%2);

console.log(odds);

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

const materials = ["i am sabari"];

console.log(materials.map(material => material.toUpperCase()));

C. Sum of all numbers in an array

var arr=[22,55,99];

var res=arr.reduce((acc,item)=>acc+item,0);

console.log(res);

D. Return all the palindromes in an array

const arr = ['bob', 1344, 12321, 'did', 'sabari'];

const isPalindrome = el => {

const str = String(el);

let i = 0;

let j = str.length - 1;

while(i < j) {

if(str[i] === str[j]) {

i++;

j--;

}

else {

return false;

}

}

return true;

};

const findPalindrome = arr => {

return arr.filter(el => isPalindrome(el));

};

console.log(findPalindrome(arr));

output:

[ 'bob', 12321, 'did' ]

1. <https://medium.com/@reach2arunprakash/guvi-zen-class-javascript-warm-up-programming-problems-15973c74b87f>

A.Fill in your code that takes an number minutes and converts it to seconds.

Examples  
toSeconds(5) ➞ 300

toSeconds(3) ➞ 180

toSeconds(2) ➞ 120

Solution

var min = 5;

function toSeconds(min) {

return min\*60;

}

var secs = toSeconds(min);

console.log(secs);

Output: 300

B.Create a function that takes a string and returns it as an integer.

Examples  
toInteger(“6”) ➞ 6

toInteger(“1000”) ➞ 1000

toInteger(“12”) ➞ 12

Solution

var mystr = "5";

function toInteger(mystr) {

return mystr;

}

var myint = toInteger(mystr);

console.log(myint);

Output:5

C.Create a function that takes a number as an argument, increments the number by +1 and returns the result.

Examples  
nextNumber(0) ➞ 1

nextNumber(9) ➞ 10

nextNumber(-3) ➞ -2

Solution:

var myint = 0;

function nextNumber(myint) {

return myint+1;

}

var myNextint = nextNumber(myint);

console.log(myNextint);

Output:1

d.Create a function that takes an array and returns the first element.

Examples  
getFirstElement([1, 2, 3]) ➞ 1

getFirstElement([80, 5, 100]) ➞ 80

getFirstElement([-500, 0, 50]) ➞ -500

Solution:

var arr = [-9, 2, 3];

function getFirstElement(arr) {

return arr[0];

}

var data = getFirstElement(arr);

console.log(data);

Output:-9

e.Convert Hours into Seconds

Write a function that converts hours into seconds.

Examples  
hourToSeconds(2) ➞ 7200

hourToSeconds(10) ➞ 36000

hourToSeconds(24) ➞ 86400

Solution:

var arr = 6;

function hourToSeconds(arr) {

return arr\*3600;

}

var data = hourToSeconds(arr);

console.log(data);

Output: 21600

f.Find the Perimeter of a Rectangle  
Create a function that takes height and width and finds the perimeter of a rectangle.

Examples  
findPerimeter(6, 7) ➞ 26

findPerimeter(20, 10) ➞ 60

findPerimeter(2, 9) ➞ 22

Solution:

function findPerimeter(num1,num2) {

return (2\*(num1+num2));

}

var peri = findPerimeter(6,7);

console.log(peri);

Output:26

g.Less Than 100?  
Given two numbers, return true if the sum of both numbers is less than 100. Otherwise return false.

Examples  
lessThan100(22, 15) ➞ true  
// 22 + 15 = 37

lessThan100(83, 34) ➞ false  
// 83 + 34 = 117

Solution:

function lessThan100(num1,num2) {

return (num1+num2<100);

}

var res = lessThan100(98,15);

console.log(res);

Output:false