q-1

const compose = (a, b) => (data) => a(b(data))

const square = (num) => {

return num \* num

}

const double = (num) => {

return num \* 2

}

const getNumber = compose (square, double)

console.log(getNumber(5));

2

const compose = (a, b) => (data) => a(b(data))

const square = (num) => {

return num \* num

}

const double = (num) => {

return num \* 2

}

const f1 = compose (square, double)

console.log(f1(5));

const compose1 = (a, b) => (data) => a(b(data))

const double1 = (num) => {

return num \* 2

}

const square1 = (num) => {

return num \* num

}

const f2 = compose1 (double1, square1)

console.log(f2(5));

console.log(f1(f2(5)))

var compose = (a, b) => (data) => a(b(data))

var double = (num) => {

return num \* 2

}

var square = (num) => {

return num \* num

}

var f2 = compose (double, square)

console.log(f2(10));

console.log(f2(20));

Q-3

let a = [1,3,5,4,2];

function check(array,isEven){

isEven(array);

}

function isEven1(a)

{

if(a%2==0){console.log("true")}

else{console.log("False")}

}

function isEven(a){

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

if(a[i]%2==0){console.log(a[i]);

break;}

}

}

isEven1(3);

isEven1(4);

check(a,isEven)

Q-4

var a= [1,2,3,4];

var newArray1 = [];

var newArray2 = [];

function mapElements1(array,square){

array.map(square);

}

function mapElements2(array,mathsqrt){

array.map(mathsqrt);

}

function square(n){

n = n\*n;

newArray1.push(n);

}

function mathsqrt(n)

{

n=n^0.5;

newArray2.push(n);

}

mapElements1(a,square);

mapElements2(a,mathsqrt);

console.log(newArray1.join(","));

console.log(newArray2.join(","));

Exercise-2

Q-1

function find(arr, func) {

while (arr[0] !== undefined) {

if (func(arr[0]))

return arr[0];

return find(arr.slice(1, arr.length), func);

}

}

console.log(find([1, 3, 5, 4, 2], (x) => !(x % 2)));

Q-2

var arr = [1, 2, 3, 4, 5];

function square(arr) {

var result=[].concat(arr);

result.forEach(function(i){

n=i\*i;

console.log(n);

})

return result;

}

function square1(arr) {

var result1=[].concat(arr);

result1.forEach(function(i){

n=i^0.5;

console.log(n);

})

return result1;

}

console.log(square(arr));

console.log(square1(arr));

3

function double(num) {

return num \* 2;

}

console.log(double);

console.log(double);