**1)find second smallest odd number -reduce ?**

let a=[1,2,3,4,5,6];

let {second}=a.reduce((acc,curr)=>{

if(curr<acc.first){

acc.second=acc.first

acc.first=curr;

}else if(curr>acc.first&&curr<acc.second){

acc.second=curr

}

return acc

},{first:Infinity,second:Infinity})

console.log(second)

**2)find the frequency of elements in an array ?**

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

let b={}

for(let key of a){

if(b[key]){

b[key]++

}else{

b[key]=1

}

}

console.log(b)

**3)function to reverse a string ?**

function string(str){

let reversestring=str.split('').reverse().join('')

return reversestring

}

let str='fahad'

let result=string(str)

console.log(result)

**4)concat arrays ?**

let arr\_1=[1,2,3];

let arr\_2=[4,5,6];

let arr\_3=arr\_1.concat(arr\_2)

console.log(arr\_3)

5)Generate an array with multiple of 7 between 1 and 100 ?

function \*generate(){

for(let i=1;i<100;i++){

if(i%7==0){

yield i

}

}

}

GEN=generate()

for(let i=1;i<=100;i++){

result=GEN.next()

if(result.done===true){

break;}

console.log(result.value)

}

**6) Longest string an array ?**

let arr=['fahad','saneeta','mariya','adhil']

let max='';

for(let key of arr){

if(max.length<key.length){

max=key

}

}

console.log(max)

**7) Ternary with return ?**

function data(){

let a=10;

return a>12?'yes':'no';

}

let result =data()

console.log(result)

**8)remove object keys corresponding to odd number values ?**

**Solution 1**

let user={

a:1,

b:2,

c:4

}

for(let key in user){

if(user[key]%2==1){

delete user[key]

}

}

console.log(user)

**Solution 2**

let user={

a:1,

b:2,

c:4

}

let filter=Object.fromEntries(Object.entries(user).filter((key,value)=>value%2==0))

console.log(filter)

**9) filter number from a mixed array ?**

let arr=['fahad',true,false,'3','4',4,4,23];

let filterArr=arr.filter(item=>{

if(typeof item==='number'){

return item

}

})

console.log(filterArr)

**11)largest element in an array reduce() ?**

let a=[1,2,3,4,9,99,4];

let b=a.reduce((acc,curr)=>{

if(curr>acc){

return curr

}

return acc

},-Infinity)

console.log(b)

**12) Generate function to generate multiple of a given number ?**

function \*generate(n){

for(let i=1;i<=10;i++){

yield i\*n

}

}

let res=generate(2)

for(let i=1;i<=15;i++){

result=res.next()

if(result.done){

break

}

console.log(result.value)

}

**13)count occurances of a value in an array ?**

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

let freq={}

for(let key of arr){

if(freq[key]){

freq[key]++

}else{

freq[key]=1

}

}

console.log(freq)

**14)reverse array using for loop ?**

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

end=a.length-1;

for(i=0;i<a.length/2;i++){

temp=a[i];

a[i]=a[end];

a[end]=temp

end--

}

console.log(a)

**15)convert string to uppercase using map ( ) ?**

let string='fahad';

let stringArr=string.split('')

let upperString=stringArr.map(item=>item.toUpperCase())

console.log(upperString.join(''))

**16) concat array use spread ?**

let arr\_1=[1,2,3];

let arr\_2=[4,5,6];

let arr\_3=arr\_1.concat(arr\_2)

console.log(arr\_3)

**17) loop an object**

let user={

a:1,

b:2,

c:3

}

for(let key in user){

if(user[key]){

console.log(key," : ",user[key])

}

}

**18) remove nth element from an array ?**

let arr=[1,23,34,5];

arr.splice(0,1)

console.log(arr)

**19) find second smallest element using reduce ?**

let arr=[1,2,3,4];

let {second}=arr.reduce((acc,curr)=>{

if(curr<acc.first){

acc.second=acc.first;

acc.first=curr;

}else if (curr>acc.first&&curr<acc.second){

acc.second=curr

}

return acc

},{first:Infinity,second:Infinity})

console.log(second)

**20) Get unique elements from an array ?**

let arr=[1,2,3,4,4,5,5]

let unique= new Set()

for(let key of arr){

if(unique.has(key)){

unique.delete(key)

}else{

unique.add(key)

}

}

console.log(unique)

**21) Get unique and repeat elements from an array ?**

let arr=[1,2,3,4,4,5,5]

let unique= new Set()

let repeat= new Set()

for(let key of arr){

if(unique.has(key)){

repeat.add(key)

unique.delete(key)

}else if(!repeat.has(key)){

unique.add(key)

}

}

console.log(unique)

console.log(repeat)

**22) find key with highest value from an object ?**

let user={

a:10,

b:49,

c:3

}

let max=-Infinity

let laregestkey;

for(let key in user){

if(user[key]>max){

max=user[key]

largestkey=key

}

}

console.log(max)

console.log(largestkey)

**23)Remove multiple of 3 from an array use reduce ?**

let arr=[1,2,3,6,3];

let b=arr.reduce((acc,curr)=>{

if(curr%3!=0){

acc.push(curr)

}

return acc

},[])

console.log(b)

**24) Find prime numbers from an array ?**

let a=[1,2,3,4,5,7]

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

for(j=2;j<a[i];j++){

if(a[i]%j==0){

break;

}else{

console.log(a[i]);

break;

}

}

}

**25)remove last property from an array ?**

let user={

a:1,

b:2,

c:4,

d:4

}

let keys=Object.keys(user);

let lastkey=keys[keys.length-1]

delete user[lastkey]

console.log(user)

**26) Sum of object properties ?** **let user={**

a:1,

b:2,

c:4,

d:4

}

let keys=Object.keys(user);

let lastkey=keys[keys.length-1]

delete user[lastkey]

console.log(user)

**28 )Double the elements ?**

let a={

b:1,

c:3

}

for(let key in a){

if(typeof a[key]=='number'){

a[key]\*=2

}

}

console.log(a)