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// Ex3.

var arr = [];

var arr5 = Array.from(Array(5).keys());

console.log(arr5);

console.log(arr5.length);

console.log(arr5[0]);

console.log(arr5[Math.floor(arr5.length/2)]);

console.log(arr5[arr5.length-1]);

var mixedDataTypes = [{a:1},"a",1,true];

console.log(mixedDataTypes);

var itCompanies = ["Facebook", "Google", "Microsoft", "Apple", "IBM", "Oracle", "Amazon"];

console.log(itCompanies);

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

itCompanies[i] = itCompanies[i].toUpperCase();

}

console.log(itCompanies);

function check(company){

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

if(itCompanies[i] === company.toUpperCase()){

return company;

}

}

return "Not Found";

}

var compO = [];

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

if(itCompanies[i].match(/O/g)){

if(itCompanies[i].match(/O/g).length > 1)

compO.push(itCompanies[i]);

}

}

console.log(compO);

itCompanies.sort();

console.log(itCompanies);

itCompanies.reverse();

console.log(itCompanies);

var test1 = itCompanies.map(function(value){

return value;

});

var test2 = itCompanies.map(function(value){

return value;

});

test1.splice(0,3);

test2.splice(test2.length - 3, 3);

console.log(test1);

console.log(test2);

var test3 = itCompanies.map(function(value){

return value;

});

test3.splice(Math.floor(test3.length/2),1);

console.log(test3);

itCompanies.shift();

console.log(itCompanies);

itCompanies.pop();

console.log(itCompanies);

itCompanies.splice(0,itCompanies.length);

console.log(itCompanies);

//Level3:

const ages = [19, 22, 19, 24, 20, 25, 26, 24, 25, 24];

ages.sort();

console.log(ages[0]);

console.log(ages[ages.length-1]);

console.log(ages[Math.floor(ages.length/2)]);

var avg = 0;

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

avg = avg + ages[i];

}

avg = avg/(ages.length);

console.log(avg);

var ranges = [];

for(let i=1;i<ages.length;i++){

ranges.push(ages[i]-ages[i-1]);

}

console.log(ranges);

console.log(Math.abs(ages[0] - avg));

console.log(Math.abs(ages[ages.length - 1] - avg));

//Output:

[ 0, 1, 2, 3, 4 ]

5

0

2

4

[ { a: 1 }, 'a', 1, true ]

[ 'Facebook',

'Google',

'Microsoft',

'Apple',

'IBM',

'Oracle',

'Amazon' ]

[ 'FACEBOOK',

'GOOGLE',

'MICROSOFT',

'APPLE',

'IBM',

'ORACLE',

'AMAZON' ]

[ 'FACEBOOK', 'GOOGLE', 'MICROSOFT' ]

[ 'AMAZON',

'APPLE',

'FACEBOOK',

'GOOGLE',

'IBM',

'MICROSOFT',

'ORACLE' ]

[ 'ORACLE',

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[ 'MICROSOFT', 'IBM', 'GOOGLE', 'FACEBOOK', 'APPLE', 'AMAZON' ]

[ 'MICROSOFT', 'IBM', 'GOOGLE', 'FACEBOOK', 'APPLE' ]

[]

19

26

24

22.8

[ 0, 1, 2, 2, 0, 0, 1, 0, 1 ]

3.8000000000000007

3.1999999999999993