Код:

// Задача №1

function camelize(str){

  str = str.split('-').map(function(item, index){

    if(index === 0){

      return item

    }else{

      return item[0].toUpperCase() + item.slice(1)

    }

  })

  str = str.join('')

  return str

}

alert(`${camelize('backround-color')}\n

${camelize(`list-style-image\n

${camelize('-webkit-transition')}`)}`)

// Задача №2

let arr = [5, 3, 8, 1]

function filterRange(arr, a, b){

  let mas = []

  arr.forEach(function(item){if(a >= item || b >= item){mas.push(item)}})

  arr = mas

  return arr

}

let filtered = filterRange(arr, 1, 4)

alert((filtered) + '\n' + (arr))

// Задача №3

function filterRangeInPlace(arr, a, b) {

  let mas = []

  arr.forEach(function(item){if(a <= item && item <= b){mas.push(item)}})

  arr = mas

  return arr

}

alert(filterRangeInPlace(arr, 1, 4))

// Задача №4

arr = [5, 2, 1, -10, 8]

arr = arr.sort(function(a, b) { return b-a })

alert(arr)

// Задача №5

arr = ["HTML", "JavaScript", "CSS"]

function copySorted(arr){

  return arr.slice().sort((a, b) => (a.length) - (b.length))

}

let sorted = copySorted(arr)

alert(sorted + '\n' + arr)

// Задача 6

class Calculator{

  constructor(){

    this.sum = prompt("Введите выражение")

  }

  calculator(){

    this.sum = this.sum.split(" ")

    if(this.sum[1] === '+'){

    this.sum[0] = Number(this.sum[0]) + Number(this.sum[2])

      return this.sum[0]

    }else if(this.sum[1] === '-'){

      this.sum[0] = Number(this.sum[0]) - Number(this.sum[2])

      return this.sum[0]

    }

  }

  addMethod(){

    this.sum = this.sum.split(" ")

    if(this.sum[1] === '\*'){

    this.sum[0] = Number(this.sum[0]) \* Number(this.sum[2])

      return this.sum[0]

    }else if(this.sum[1] === '/'){

      this.sum[0] = Number(this.sum[0]) / Number(this.sum[2])

      return this.sum[0]

    }else if(this.sum[1] === '\*\*'){

      this.sum[0] = Number(this.sum[0]) \*\* Number(this.sum[2])

      return this.sum[0]

    }

  }

}

let calc = new Calculator

alert(calc.calculator())

let powerCalc = new Calculator

alert(powerCalc.addMethod())

// Задача №7

let vasya = { name: "ВАСЯ", age: 25}

let petya = { name: "ПЕТЯ", age: 30}

let masha = { name: "МАША", age: 28}

let users = [ vasya, petya, masha ]

let names = users.map((user) => user.name)

alert(names)

// Задача №8

vasya = { name: "ВАСЯ", surname: " ПУПКИН", id: 1}

petya = { name: "ПЕТЯ", surname: " ИВАНОВ", id: 2}

masha = { name: "МАША", surname: " ПЕТРОВА", id: 3}

users = [ vasya, petya, masha ]

let usersMapped = [

  {fullName: vasya.name + vasya.surname, id: vasya.id},

  {fullName: petya.name + petya.surname, id: vasya.id},

  {fullName: masha.name + masha.surname, id: masha.id}

]

alert(usersMapped[0].id + '\n' + usersMapped[0].fullName)

// Задача №9

vasya = { name: "ВАСЯ", age: 25}

petya = { name: "ПЕТЯ", age: 30}

masha = { name: "МАША", age: 28}

users = [ vasya, petya, masha ]

function sortByAge(c){

  c.sort(function(a, b){ return a.age - b.age })

}

sortByAge(users)

alert(users[0].name + '\n' + users[1].name + '\n' + users[2].name)

// Задача №10

function shuffle(array) {

  for (let i = array.length - 1; i > 0; i--) {

    let j = Math.floor(Math.random() \* (i + 1));

    [array[i], array[j]] = [array[j], array[i]]

    j+=1

  }

  return array

}

arr = [1,2,3]

alert(shuffle(arr))

// Задача №11

vasya = { name: "ВАСЯ", age: 25}

petya = { name: "ПЕТЯ", age: 30}

masha = { name: "МАША", age: 28}

users = [ vasya, petya, masha ]

function getAverageAge(users){

  let sr = users.reduce((sum, item) => sum + item.age, 0)

  return Math.floor(sr/users.length)

}

alert(getAverageAge(users))

// Задача №12

strings = ['кришня','кришня','харе','харе','харе','харе','кришня','кришня',':-o']

function unique(arr){

  let a = arr.indexOf('кришня')

  let b = arr.indexOf('харе')

  let c = arr.indexOf(':-o')

  arr = [arr[a], arr[b], arr[c]]

  return arr

}

alert(unique(strings))

// Задача №13

users = [

  {id: 'jonh', name: 'Jonh Smith', age: 20},

  {id: 'ann', name: 'Ann Smith', age: 24},

  {id: 'pete', name: 'Pete Peterson', age: 31}

]

function groupById(arr) {

  return arr.reduce((acc, user) => {

      acc[user.id] = user;

      return acc;

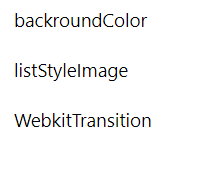
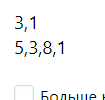
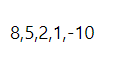
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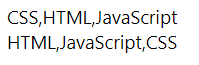
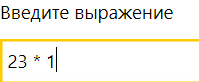
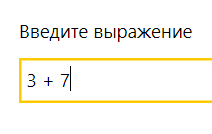
}

let usersByld = groupById(users)

console.log(usersByld)

Результат:

1) 2) 3) 4) 

5) 6) 

7) 8) 9) 

10) 11) 12) 13) 