

```
// document.write('Hi')

// alert('hi, How are you')

// console.log('hi')

// print()

// let a = 'ali'
// var b = 'Ali'
// const c = 'ALI'
// document.writeln(a, b, c)

// a = 1
// b = 2
// c = 3
// document.writeln(a, b, c)

// let x
// x = 6
// console.log(x)

// document.writeln(5 + 6) /10 *2

// document.writeln('Daniel'+ ' ' + 'Asa')

// let $ = 'Hello World'
// let $$$ = 2
// let $myMoney = 5
// document.writeln($, $$$, $myMoney)

// let _lastName = 'Daniel'
// let _x = 2
// let _100 = 5
// document.writeln(_lastName, _x, _100)

// {
//     let x = 2
//     document.writeln(x)
// }

// const PI = 3.146597283
// PI = 3.14
```

```
// PI = PI + 10           //=>Output: TypeError: Assignment to constant
variable.
// document.writeln(PI)

// const cars = ['Saab', 'Volvo', 'BMW']
// cars[0] = 'Toyota'
// cars.push('Audi')
// console.log(cars)

// const car = {type:'fiat', model:'500', color:'whrite'}
// car.color = 'red'
// car.owner = 'Daniel'
// console.log(car)

// let a = 'A'
// let b = 'B'
// let c = a < b
// console.log(c)

// let x = 'Ali'
// console.log(typeof(x))
// function myFunction(a, b) {
//     return a + b
// }
// document.writeln(myFunction(5, 5))

// const car = {type:'Fiat', model:'500', color:'whrite'}
// const person = {
//     firstName: 'Daniel',
//     lastName: 'Asa',
//     id: 8080,
//     fullName: function(firstName, lastName){
//         return person.firstName+ " " + person.lastName
//     }
// }
// console.log(car)
// console.log(person.fullName())

// document.writeln(Date())

// let txt = 'ABCDEFGHIGKLMNOPQRSTUVWXYZ'
// let length = txt.length
// document.writeln(length)
```

```
// let txt = 'Apple, Banana , Kiwi'
// let part = txt.slice(7, 13)
// document.writeln(part)

// let str = 'Apple, Banana, Kiwi'
// let part = str.substring(7, 13)
// document.writeln(part)

// let str = 'Applw, Banana, Kiwi'
// let part = str.substr(7, 6)
// document.writeln(part)

// let txt = 'Hi Im Dnaiel Asa'
// let newTxt = txt.replace('Daniel', 'Ali')
// document.writeln(newTxt)

// let text = 'Its car red'
// let newText = text.replaceAll('car', 'Car')
// document.writeln(newText)

// let txt0 = 'hello world'
// let txt1 = txt0.toUpperCase()
// document.writeln(txt1)

// let txt0 = 'HELLO WORLD'
// let txt1 = txt0.toLowerCase()
// document.writeln(txt1)

// let txt0 = 'Daniel'
// let txt1 = 'Asa'
// let full = txt0.concat(' ', txt1)
// document.writeln(full)

// let txt = '      Ali      '
// let txt1 = txt.trim()
// document.writeln(txt1)

// let txt0 = '      Asa      '
// let txt1 = txt0.trimStart()
// document.writeln(txt1)

// let txt0 = '      Daniel      '
```

```
// let txt1 = txt0.trimEnd()
// document.writeln(txt1)

// let txt = '5'
// let padded = txt.padStart(4, 'x')
// document.writeln(padded)

// let txt = '5'
// let padded = txt.padEnd(4, 'x')
// document.writeln(padded)

// let txt = 'Daniel Asa'
// let char = txt.charAt(0)
// document.writeln(char)

// let txt = 'Daniel Asa'
// let char = txt.charCodeAt(0)
// document.writeln(char)

// let txt = 'a, b, c, d, e, f'
// const myArray = txt.split(',')
// document.writeln(myArray[0])

// let txt = 'Daniel Asa its hacking'
// let txt1 = txt.indexOf('Asa')
// document.writeln(txt1)

// let txt = 'Daniel Asa its hacking'
// let txt1 = txt.lastIndexOf('its')
// document.writeln(txt1)

// let txt = 'Daniel Asa its hacking'
// let txt1 = txt.search('hacking')
// document.writeln(txt1)

// let text = "The rain in SPAIN stays mainly in the plain";
// let txt1 = text.match("ain");
// document.writeln(txt1)

// let text = "I love cats. Cats are very easy to love. Cats are very popular"
// let iterator = text.matchAll("Cats")
// document.writeln(iterator)
```

```
// let text = "Hello world, welcome to the universe"
// let txt1 = text.includes("world")
// document.writeln(txt1)

// let txt = 'hello wold How are you'
// let txt1 = txt.startsWith('hello')
// document.writeln(txt1)

// let text = "John Doe"
// let txt1 = text.endsWith("Doe")
// document.writeln(txt1)

// let name = `Daniel Asa`
// document.writeln(name)

// let a = 'Daniel'
// let b = 'Asa'
// let c = `welcome ${a}, ${b}?`
// document.writeln(c)

// let price = 10
// let VAT = 0.25
// let total = `Total: ${ (price * (1 + VAT)).toFixed(2) }`
// document.writeln(total)

// let x = 123
// let y = x.valueOf()
// console.log(x)

// document.writeln(Number(new Date('2023-05-06')))

// document.writeln(Number.isInteger(10))

// document.writeln(Number.isInteger(10.5))

// document.writeln(Number.isSafeInteger(10))

// document.writeln(Number.isSafeInteger(12345678901234567890))

// let x = Number.EPSILON
// console.log(x)
```

```
// let x = Number.MAX_VALUE
// console.log(x)

// let x = Number.MIN_VALUE
// console.log(x)

// let x = Number.MAX_SAFE_INTEGER
// console.log(x)

// let x = Number.MIN_SAFE_INTEGER
// console.log(x)

// const cars = ["Saab", "Volvo", "BMW"]
// console.log(cars[0] = "Opel")

// const person = {firstName:"John", lastName:"Doe", age:46}
// console.log(person.firstName)

// const fruits = ["Banana", "Orange", "Apple"]
// let type = typeof fruits
// console.log(type)

// const fruits = ["Banana", "Orange", "Apple"]
// console.log(Array.isArray(fruits))

// const fruits = ["Banana", "Orange", "Apple", "Mango"]
// document.write(fruits.toString())

// const fruits = ["Banana", "Orange", "Apple", "Mango"]
// document.write(fruits.join(" * "))

// const fruits = ["Banana", "Orange", "Apple", "Mango"]
// console.log(fruits.pop())

// const fruits = ["Banana", "Orange", "Apple", "Mango"]
// console.log(fruits.push("Kiwi"))

// const fruits = ["Banana", "Orange", "Apple", "Mango"]
// console.log(fruits.shift())

// const fruits = ["Banana", "Orange", "Apple", "Mango"]
// console.log(fruits.unshift("Lemon"))
```

```
// const fruits = ["Banana", "Orange", "Apple", "Mango"]
// console.log(delete fruits[0])

// const myGirls = ["Cecilie", "Lone"]
// const myBoys = ["Emil", "Tobias", "Linus"]
// const myChildren = myGirls.concat(myBoys)
// console.log(myChildren)

// const myArr = [[1,2],[3,4],[5,6]]
// const newArr = myArr.flat()
// console.log(newArr)

// const fruits = ["Banana", "Orange", "Apple", "Mango"]
// console.log(fruits.splice(2, 0, "Lemon", "Kiwi"))

// const fruits = ["Banana", "Orange", "Apple", "Mango"]
// console.log(fruits.splice(0, 1))

// const fruits = ["Banana", "Orange", "Apple", "Mango"]
// console.log(fruits.toString())

// const fruits = ["Banana", "Orange", "Apple", "Mango"]
// console.log(fruits.sort())

// const fruits = ["Banana", "Orange", "Apple", "Mango"]
// console.log(fruits.sort())
// console.log(fruits.reverse())

// const points = [40, 100, 1, 5, 25, 10]
// console.log(points.sort(function(a, b){return a - b}))

// const points = [40, 100, 1, 5, 25, 10]
// let x = points.sort(function(){return 0.5 - Math.random()})
// console.log(x)

// const points = [40, 100, 1, 5, 25, 10]
// myArrayMax(points);
// function myArrayMax(arr) {
//     return Math.max.apply(null, arr)
// }
// console.log(myArrayMax())

// const points = [40, 100, 1, 5, 25, 10]
```

```
// myArrayMin(points);
// function myArrayMin(arr) {
//     return Math.min.apply(null, arr)
// }

// console.log(myArrayMin())

// const numbers1 = [45, 4, 9, 16, 25]
// const numbers2 = numbers1.map(myFunction)
// document.writeln(numbers2)
// function myFunction(value, index, array) {
//     return value * 2
// }

// console.log(myFunction())

// const myArr = [1, 2, 3, 4, 5, 6]
// const newArr = myArr.flatMap((x) => x * 2)
// console.log(newArr)

// const numbers = [45, 4, 9, 16, 25];
// const over18 = numbers.filter(myFunction);
// document.writeln(over18);
// function myFunction(value, index, array) {
//     return value > 18;
// }

// console.log(myFunction())

// const numbers = [45, 4, 9, 16, 25]
// let sum = numbers.reduce(myFunction)
// function myFunction(total, value, index, array) {
//     return total + value;
// }

// console.log(myFunction())

// const numbers = [45, 4, 9, 16, 25]
// let sum = numbers.reduceRight(myFunction)
// function myFunction(total, value, index, array) {
//     return total + value
// }
```



```
// console.log(myFunction())

// const numbers = [45, 4, 9, 16, 25]
// let allOver18 = numbers.every(myFunction)
// function myFunction(value, index, array) {
//   return value > 18
// }

// console.log(myFunction())

// const numbers = [45, 4, 9, 16, 25]
// let someOver18 = numbers.some(myFunction)
// function myFunction(value, index, array) {
//   return value > 18
// }

// console.log(myFunction())

// const numbers = [4, 9, 16, 25, 29]
// let first = numbers.find(myFunction)
// function myFunction(value, index, array) {
//   return value > 18
// }

// console.log(myFunction())

// const numbers = [4, 9, 16, 25, 29]
// let first = numbers.findIndex(myFunction)
// function myFunction(value, index, array) {
//   return value > 18
// }

// console.log(myFunction())

// const fruits = ["Banana", "Orange", "Apple", "Mango"]
// const keys = fruits.keys()
// console.log(keys)

// const fruits = ["Banana", "Orange", "Apple", "Mango"]
// console.log(fruits.includes("Mango"))

// const q1 = ["Jan", "Feb", "Mar"]
// const q2 = ["Apr", "May", "Jun"]
```

```
// const q3 = ["Jul", "Aug", "Sep"]
// const q4 = ["Oct", "Nov", "May"]
// const year = [...q1, ...q2, ...q3, ...q4]

// console.log(year)

// let msec = Date.parse("March 21, 2012")
// console.log(msec)

// const d = new Date("2021-03-25")
// console.log(d.getFullYear())

// const d = new Date("2021-03-25")
// console.log(d.getMonth())

// const months = ["January", "February", "March", "April", "May",
"June", "July", "August", "September", "October", "November",
"December"]
// const d = new Date("2021-03-25")
// let month = months[d.getMonth()]
// console.log(month)

// const d = new Date("2021-03-25")
// console.log(d.getDate())

// const d = new Date("2021-03-25")
// console.log(d.getHours())

// const d = new Date("2021-03-25")
// console.log(d.getMinutes())

// const d = new Date("2021-03-25")
// console.log(d.getSeconds())

// const d = new Date("2021-03-25")
// console.log(d.getMilliseconds())

// const d = new Date("2021-03-25")
// console.log(d.getDay())

// const days = ["Sunday", "Monday", "Tuesday", "Wednesday",
"Thursday", "Friday", "Saturday"]
// const d = new Date("2021-03-25")
```

```
// let day = days[d.getDay()]
// console.log(day)

// const d = new Date("1970-01-01")
// console.log(d.getTime())

// let ms = Date.now();
// console.log(ms)

// const minute = 1000 * 60
// const hour = minute * 60
// const day = hour * 24
// const year = day * 365
// let years = Math.round(Date.now() / year)
// console.log(years)

// const d = new Date()
// d.setFullYear(2020)
// console.log(d)

// const d = new Date()
// console.log(d.setFullYear(2020, 11, 3))

// const d = new Date()
// console.log(d.setMonth(11))

// const d = new Date()
// console.log(d.setDate(15))

// const d = new Date()
// console.log(d.setDate(d.getDate() + 50))

// const d = new Date()
// console.log(d.setHours(22))

// const d = new Date()
// console.log(d.setMinutes(30))

// const d = new Date()
// console.log(d.setSeconds(30))

// console.log(Math.PI)
```

```
// console.log(Math.round(4.6))

// console.log(Math.ceil(4.9))
// console.log(Math.ceil(4.7))
// console.log(Math.ceil(4.4))
// console.log(Math.ceil(4.2))
// console.log(Math.ceil(-4.2))

// console.log(Math.floor(4.9))
// console.log(Math.floor(4.7))
// console.log(Math.floor(4.4))
// console.log(Math.floor(4.2))
// console.log(Math.floor(-4.2))

// console.log(Math.trunc(4.9))
// console.log(Math.trunc(4.7))
// console.log(Math.trunc(4.4))
// console.log(Math.trunc(4.2))
// console.log(Math.trunc(-4.2))

// console.log(Math.sign(-4))
// console.log(Math.sign(0))
// console.log(Math.sign(4))

// console.log(Math.pow(8, 2))

// console.log(Math.sqrt(64))

// console.log(Math.abs(-4.7))

// console.log(Math.sin(90 * Math.PI / 180))

// console.log(Math.min(0, 150, 30, 20, -8, -200))
// console.log(Math.max(0, 150, 30, 20, -8, -200))

// console.log(Math.random())

// console.log(Math.log(1))

// console.log(Math.log2(8))

// console.log(Math.log10(1000))
```

```
// console.log(Math.floor(Math.random() * 10))

// let x = (10 > 9)
// console.log(x)

// let x = (10 < 9)
// console.log(x)

// let name = null
// let text = "missing"
// let result = name ?? text
// console.log(result)

// let x = 17
// if (x > 18) {
//     console.log('good day')
// } else {
//     console.log('no')
// }

// let x = 0
// if(x > 1) {
//     document.write('1')
// } else if (x < 0){
//     document.write('0')
// } else {
//     document.write("?")
// }

// let color = ''
// switch(color){
//     case 'red':
//         console.log('color => red')
//         break;
//     case 'blue':
//         console.log('color => blue')
//         break;
//     default:
//         console.log(':(')
// }

// for (let i = 0; i < 10; i++){
//     console.log(i)
```

```
// }

// let x = ['apple', 'banana', 'orange', 'per']

// for (let y in x) {
//     console.log(y += x)
// }

// const numbers = [45, 4, 9, 16, 25]

// let txt = ""
// for (let x in numbers) {
//     console.log(txt += numbers[x])
// }

// const numbers = [45, 4, 9, 16, 25]

// let txt = ""
// numbers.forEach(myFunction)

// function myFunction(value, index, array) {
//     console.log(txt += value)
// }

// const cars = ["BMW", "Volvo", "Mini"]

// let text = ""
// for (let x of cars) {
//     console.log(text = x)
// }

// let language = "JavaScript"

// let text = ""
// for (let x of language) {
//     console.log(text = x)
// }

// let txt = [10, 20, 30, 40, 50, 60, 70]
// let i = txt
// while (txt) {
//     console.log(txt = i, i++)
// }
```

```
// const cars = ["BMW", "Volvo", "Saab", "Ford"]
// let i = 0
// let text = ""

// while (cars[i]) {
//   console.log(text = cars[i], i++)
// }

// let result = ""
// let i = 0
// do {
//   i += 1
//   result += `${i} `
// } while (i > 0 && i < 5)

// console.log(result)

// const fruits = new Map([
//   ["apples", 500],
//   ["bananas", 300],
//   ["oranges", 200]
// ])

// console.log(fruits.get("apples"))

// const fruits = new Map([
//   ["apples", 500],
//   ["bananas", 300],
//   ["oranges", 200]
//   ]);

// console.log(fruits.size)

// const fruits = new Map([
//   ["apples", 500],
//   ["bananas", 300],
//   ["oranges", 200]
//   ])
// fruits.delete("apples")
// console.log(fruits.size)

// const fruits = new Map([
```

```
//      ["apples", 500],
//      ["bananas", 300],
//      ["oranges", 200]
//  ]})

// console.log(fruits.has("apples"))

// let x = new Date()
// console.log(Number(x))

// let x = new Date()
// console.log(x.getTime())

// let text = "Visit W3Schools!"
// let n = text.search("W3Schools")
// console.log(n)

// let text = "Visit Microsoft!"
// let result = text.replace("Microsoft", "W3Schools")
// console.log(result)

// const pattern = /e/
// let x = pattern.test("The best things in life are free!")
// console.log(x)

// let num = 1;
// try {
//     console.log(num.toPrecision(500))
// }
// catch(err) {
//     console.log(err.name)
// }

// let num = 1;
// try {
//     console.log(num.toUpperCase())
// }
// catch(err) {
//     console.log(err.name)
// }

// let txt = 1854255
// try{
```



```
//      console.log(txt.toUpperCase())
// }
// catch(err){
//      console.log(err.name)
// }

// class Car {
//      constructor(name, age) {
//          this.name = name
//          this.age = age
//      }
// }

// const x = new Car ('Daniel', 18)
// const y = new Car ('Lisa', 26)

// console.log(x.name + ' ' + y.age)

// let input = prompt('type your number :')

// let x = input

// switch(x) {
//     case '10' :
//         alert('hi')
//     case '' :
//         alert(':(')
// }

// function person(first, last, age, eyecolor) {
//     this.firstName = first
//     this.lastName = last
//     this.yourage = age
//     this.color = eyecolor
// }

// const dad = new person('mohamad', 'asa', 51, 'blue')
// const mom = new person('azam', 'latify', 35, 'green')

// console.log(dad, mom)

// x = findMax(1, 123, 500, 115, 44, 88)
```

```
// function findMax() {
//   let max = -Infinity
//   for (let i = 0; i < arguments.length; i++) {
//     if (arguments[i] > max) {
//       max = arguments[i]
//     }
//   }
//   return max
// }
// console.log(x)

// x = sumAll(1, 123, 500, 115, 44, 88)

// function sumAll() {
//   let sum = 0
//   for (let i = 0; i < arguments.length; i++) {
//     sum += arguments[i]
//   }
//   return sum
// }

// console.log(x)

// function myFunction(a, b) {
//   return a * b
// }
// console.log(window.myFunction(10, 2))

// const myObject = {
//   firstName: "John",
//   lastName: "Doe",
//   fullName: function () {
//     return this.firstName + " " + this.lastName
//   }
// }
// console.log(myObject.fullName())

// function myFunction(arg1, arg2) {
//   this.firstName = arg1
//   this.lastName = arg2
// }
// const myObj = new myFunction("John", "Doe")
```

```

// console.log(myObj.firstName)

// const person = {
//   fullName: function() {
//     return this.firstName + " " + this.lastName;
//   }
// }

// const person1 = {
//   firstName: "John",
//   lastName: "Doe"
// }

// const person2 = {
//   firstName: "Mary",
//   lastName: "Doe"
// }

// console.log(person.fullName.call(person1))

// const person = {
//   fullName: function(city, country) {
//     return this.firstName + " " + this.lastName + "," + city + "," +
country
//   }
// }

// const person1 = {
//   firstName: "John",
//   lastName: "Doe"
// }

// console.log(person.fullName.apply(person1, ["Oslo", "Norway"]))

// function full(name, last) {
//   let n = name
//   let l = last
//   let f = `${n} ${l}`
//   return {
//     f
//   }
// }

// console.log(full('Dnaiel', 'Asa'))

// setTimeout(() => {

```

```
//      console.log("Delayed for 1 second.")
//    }, 1000)

// setTimeout(() => {
//      console.log("this is the first message")
//    }, 5000)
//    setTimeout(() => {
//      console.log("this is the second message")
//    }, 3000)
//    setTimeout(() => {
//      console.log("this is the third message")
//    }, 1000)

// setTimeout(() => {
//      console.log("Hello World!")
//    }, 500)

// async function myFunction(){
//      return 'hello'
// }
// console.log(myFunction())

// Animation

// let w = window.innerWidth
// let h = window.innerHeight

// console.log(w)
// console.log(h)

// let a = window.open()
// document.writeln(a)

// let b = window.close()
// document.writeln(b)

// let c = window.moveTo()
// document.writeln(c)

// let d = window.resizeBy()
// document.writeln(d)

// let e = window.location.href
```

```
// console.log(e)

// let f = window.history.back()
// console.log(f)

// let g = window.history.forward()
// console.log(g)

// let h = window.navigator.cookieEnabled
// console.log(h)

// let i = window.navigator.appName
// console.log(i)

// let j = window.navigator.product
// console.log(j)

// let k = window.navigator.appVersion
// console.log(k)

// let l = window.navigator.userAgent
// console.log(l)

// let m = window.navigator.platform
// console.log(m)

// let n = window.navigator.language
// console.log(n)

// let o = window.navigator.onLine
// console.log(o)

// let p = window.navigator.javaEnabled()
// console.log(p)

// let q = window.confirm()
// console.log(q) =====>>>>>>>best
554545454545454545454545745828528285282852

// let r = window.clearTimeout()
// console.log(r)

// let s = new Date()
```

```
// s.toLocaleTimeString()
// console.log(s)

// function getCookie(cname) {
//     let name = cname + "=";
//     let decodedCookie = decodeURIComponent(document.cookie);
//     let ca = decodedCookie.split(';');
//     for(let i = 0; i <ca.length; i++) {
//         let c = ca[i];
//         while (c.charAt(0) == ' ') {
//             c = c.substring(1);
//         }
//         if (c.indexOf(name) == 0) {
//             return c.substring(name.length, c.length);
//         }
//     }
//     return "";
// }

// console.log(getCookie())

// let t = window.history.go(-2)
// console.log(t)

///////////END\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
```