

2023-11-07

```
let a = [[1, 2, 3, 4], [5, 6, 7, 8], [9, 10, 11, 12]];
```

Handwritten notes:

- $a = [i, b, c]$ (with arrows pointing to the first, second, and third elements of the array)
- $a[i][j]$ (with arrows pointing to the first and second elements of the array)
- $a = [a, b, c]$ (with arrows pointing to the first, second, and third elements of the array)
- $a = [1, 2, 3, 4]$ (with arrows pointing to the first, second, and third elements of the array)
- $b = [5, 6, 7, 8]$ (with arrows pointing to the first, second, and third elements of the array)
- $c = [9, 10, 11, 12]$ (with arrows pointing to the first, second, and third elements of the array)

Handwritten text:

- $a[i][j]$ 3행 4열
- 2차원 배열

```
let a = [[1, 2, 3, 4], [5, 6, 7, 8], [9, 10, 11, 12]];
```

```
for (let i=0; i<a.length; i++){  
  for (let j=0; j<a[i].length; j++){  
    console.log(a[i][j]);  
  }  
}
```

$i < a.length$ 로 a배열의 행을 찾고

$j < a[i].length$ 로 행 안의 개수를 찾음

1	1	3	4	5	6
2	3				
4	5	15			
5	7	21	27	35	43
7	9	27	34		

```
let a=[[1,1,3,4,5,6],[2,3],[4,5,15],[5,7,21,27,35,43],[7,9,27,34]];

for (let i=0; i<a.length; i++){ /* 행 */
  for(let j=0; j<a[i].length; j++){ /* 열 */
    console.log(a[i][j]);
  }
  console.log("");
}
```

```
let c=[[1,2],[3,4]],[[5,6],[7,8]],[[9,10],[11,12]]]
for (let i=0; i<c.length; i++){
  for(let j=0; j<c[i].length; j++){
    for(let k=0; k<c[i][j].length; k++)
      console.log(c[i][j][k]);
  }
  console.log("");
}
```

```
var a=[];
for (let i=1; i<=100; ++i){
  var b = Math.floor(Math.random()*100)+1;
  a.push(b);
  a.sort(function(a, b){ /* 오름차순 정렬 */
    return a-b;
  });
}
console.log(a);
```

```
let a=[];
for(let i=0; i<100; i++){
  a.push(Math.floor(Math.random()*100)+1);
}
console.log(a);
a.sort((a,b)=>a-b);
console.log(a);
```

```

function one(){
    let arr = [];
    for(let k=0; k<100; k++){
        let makeNum = Math.floor((Math.random()*100)) + 1 ;
        arr.push(makeNum);
    }
    console.log(JSON.stringify(arr));
    for(let j=0; j<arr.length; j++){
        for(let i=0; i<arr.length; i++){
            if(arr[i]>arr[i+1]){
                let data = arr[i+1];
                arr[i+1] = arr[i];
                arr[i] = data;
            }
        }
    }
    console.log(JSON.stringify(arr));
}

function two() {
    let arr = [];
    for (let k = 0; k < 100; k++) {
        let makeNum = Math.floor((Math.random() * 100)) + 1;
        if (JSON.stringify(makeNum).length === 2) {
            makeNum = "0" + JSON.stringify(makeNum);
        } else if (JSON.stringify(makeNum).length === 1) {
            makeNum = "00" + JSON.stringify(makeNum);
        }
        arr.push(makeNum);
    }
    console.log(JSON.stringify(arr));
    arr.sort();
    console.log(JSON.stringify(arr));
    let makeInt = [];
    for(let j=0; j<arr.length; j++){
        makeInt.push(parseInt(arr[j]))
    }
    console.log(JSON.stringify(makeInt));
}

one();
console.log("")
console.log("")
console.log("")
two();

```

let은 지역변수

var는 전역변수

```
let s="hello world";

for(let i=0; i<s.length; i++){
    console.log(s[i]);
}

console.log(s[0]);
s[0]="H"; /* 대소문자 구분 하지않고 소문자로 표기 됨 */
console.log(s[0]);
```

```
if(a>=0){
    console.log("해당 문자열이 있습니다.");
}
else if(a<0){ -> if 다음에 조건을 또 주는것
    console.log("해당 문자열이 없습니다.");
}

if(b>=0){
    console.log("해당 문자열이 있습니다.");
}
else{ -> if조건이 아닐경우 전부
    console.log("해당 문자열이 없습니다.");
}
```

```
let a=85;

(a>0)?console.log("양수"):console.log("음수");
```

예 아니오가 아닌 복잡한 조건들은 if, else if로 처리

$a \parallel b$ -> a와 b가 모두 거짓일 경우에만 거짓

$a \&\& b$ -> a와 b가 모두 참일 경우에만 참

$!a$ -> a가 참이면 거짓, 거짓이면 참