

DOM1

```
<section id="section1">
  <div class="table-wrap">

    </div>
</section>
<section id="section2">
  <div class="table-wrap">

    </div>
</section>
<section id="section3">
  <div class="table-wrap">

    </div>
</section>
<section id="section4">
  <div class="table-wrap">

    </div>
</section>
<section id="section5">
  <div class="table-wrap">

    </div>
</section>
<section id="section6">
  <div class="table-wrap">

    </div>
</section>
<section id="section7">
  <div class="table-wrap">
```

```
</div>
</section>
```

```
<section id="section8">
  <div class="table-wrap">
```

```
    </div>
  </section>
```

```
<section id="section9">
  <div class="table-wrap">
```

```
    </div>
  </section>
```

```
<section id="section10">
  <div class="table-wrap">
```

```
    </div>
  </section>
```

```
<script>
  class Arr {

    constructor(a,b) {
      b%2==0?(b=b-1):b;
      this.n = a;
      this.m = b;
    }
    createTableFn(){
      var beforeBegin = 'beforebegin'; //타겟 요소 밖(Out) 이전(Preview)에 생성
      var afterEnd = 'afterend';       //타겟 요소 밖(Out) 이후(Next)에 생성
      var afterBegin = 'afterbegin';   //타겟 안(In) 요소 이전에
      var beforeEnd = 'beforeend';     //타겟 안(In) 요소 다음에
```

```

//타이틀 생성
for(var i=0; i<this.n; i++){
    var section = document.querySelector(`#section${i+1}`);
    section.insertAdjacentHTML(afterBegin,`<h1>${this.m}행 ${this.m}열 - 행열(Matrix) No.${i+1}<10?('0'+(i+1)):i+1}</h1>`);
}

//테이블 table 생성 n개
for(var i=0; i<this.n; i++){ //테이블 table 생성 n개
    var tableBox = document.querySelector('#section'+(i+1)+' .table-wrap');
    var createTable = document.createElement('table');
    createTable.className = 'table';
    tableBox.appendChild(createTable);
}

// 각 테이블에 tr 생성 n개
for(var i=0; i<this.n; i++){
    var table = document.querySelector('#section' +(i+1)+ ' .table');
    for(var j=0; j<this.m; j++){ // 각 테이블에 tr 생성 n개
        var createTr = document.createElement('tr');
        table.appendChild(createTr);
    }
}

// 각 테이블에 td 생성 n개
for(var i=0; i<this.n; i++){
    var tr = document.querySelectorAll('#section' +(i+1)+ ' .table tr');
    for(var j=0; j<this.m; j++){ // 각 테이블에 td 생성 n개
        for(var k=0; k<this.m; k++){ // 각 테이블에 td 생성 n개
            var createTd = document.createElement('td');
            tr[j].appendChild(createTd);
        }
    }
}
}
section1(){

```

```

    var k=0;
    var table = document.querySelector('#section1 .table')
    for(var i=0; i<this.m; i++){
        for(var j=0; j<this.m; j++){
            k++;
            table.children[i].children[j].textContent=k;
        }
    }
}
section2(){
    var k=Math.pow(this.m,2)+1;
    var table = document.querySelector('#section2 .table')
    for(var i=0; i<this.m; i++){
        for(var j=0; j<this.m; j++){
            k--;
            table.children[i].children[j].textContent=k;
        }
    }
}
section3(){
    var k=0;
    var table = document.querySelector('#section3 .table')
    for(var i=0; i<this.m; i++){
        for(var j=i; j<this.m; j++){
            k++;
            table.children[i].children[j].textContent=k;
        }
    }
}
section4(){
    var k=0;
    var table = document.querySelector('#section4 .table')
    for(var i=0; i<this.m; i++){
        for(var j=0; j<=i; j++){
            k++;
            table.children[i].children[j].textContent=k;
        }
    }
}

```

```

        }
    }
}
section5(){
    var k=0;
    var table = document.querySelector('#section5 .table')
    for(var i=0; i<this.m; i++){
        for(var j=0; j<this.m-i; j++){
            k++;
            table.children[i].children[j].textContent=k;
        }
    }
}
section6(){
    var k=0;
    var table = document.querySelector('#section6 .table')
    for(var i=0; i<this.m; i++){
        for(var j=(this.m-1)-i; j<this.m; j++){
            k++;
            table.children[i].children[j].textContent=k;
        }
    }
}
section7(){
    var k=0;
    var table = document.querySelector('#section7 .table')
    for(var i=0; i<this.m; i++){
        if(i<=(this.m-1)/2){
            for(var j=i; j<this.m-i; j++){ //0~4/1~3/2~2
                k++;
                table.children[i].children[j].textContent=k;
            }
        }
        else{
            for(var j=(this.m-1)-i; j<=i; j++){ //1 ~ 3 /0 ~ 4
                k++;
            }
        }
    }
}

```

```

        table.children[i].children[j].textContent=k;
    }
}
}
}
section8(){
    var k=0;
    var table = document.querySelector('#section8 .table')
    //0 : 2~2
    //1 : 1~3
    //2 : 0~4
    //3 : 1~3
    //4 : 2~2
    for(var i=0; i<this.m; i++){
        if( i<=((this.m-1)/2) ){
            for(var j=((this.m-1)/2)-i; j<Math.round((this.m)/2)+i; j++){ //5개인경우 : 2-0=2, 2+0=2
                k++;
                table.children[i].children[j].textContent=k;
            }
        }
        else{
            for(var j=i-((this.m-1)/2); j<(this.m+(this.m-1)/2)-i; j++){ //5개인경우 : 3-2=1, (칸수+1)6-3=3
                k++;
                table.children[i].children[j].textContent=k;
            }
        }
    }
}
}
section9(){ // ㄱ 모양

    var k=0;
    var table = document.querySelector('#section9 .table')

    for(var i=0; i<this.m; i++){
        if( i%2==0 ){

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```

        for(var j=0; j<this.m; j++){
            k++;
            table.children[i].children[j].textContent=k;
        }
    }
    else{
        for(var j=this.m-1; j>=0; j--){
            k++;
            table.children[i].children[j].textContent=k;
        }
    }
}

}
section10(){

}
}

```

```

class TableArr extends Arr {
    init(){
        super.createTableFn();
        super.section1();
        super.section2();
        super.section3();
        super.section4();
        super.section5();
        super.section6();
        super.section7();
        super.section8();
        super.section9();
        super.section10();
    }
}

```

```
const createTableElment = new TableArr(10,10);
    createTableElment.init();
```

```
</script>
```

DOM2

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>142_DOM_탐색하기</title>
    <style>
        * {margin:0;padding:0;vertical-align:middle;}
        html,body{width:100%;height:100%;}
        section {padding:100px 0;}
        h1 {text-align: center;font-size: 30px;padding: 30px 0;}
        table {border-collapse: collapse;margin:0 auto;}
        td { width:70px;height:70px;text-align:center;vertical-align: middle;border:1px solid #ccc;font-size:20px;}

    </style>
</head>
<body>

    <script>
        class Arr {

            constructor(a,b) {
                b%2==0?(b=b-1):b;
                this.n = a;
                this.m = b;
            }
        }
    </script>
</body>
</html>
```



```

createTableFn(){
    //섹션(section) 요소 생성
    for(var i=0; i<this.n; i++){
        var body = document.querySelector('body');
        var section = document.createElement('section');
        section.id = 'section'+(i+1);
        body.appendChild(section);
    }

    //헤딩(h1) 요소 생성
    for(var i=0; i<this.n; i++){
        var section = document.querySelectorAll('section'); //섹션 배열처리
        var h1 = document.createElement('h1');
        var h1Txt = document.createTextNode(this.m + '행 ' + this.m + '열 행열(Metix) No. ' + (i+1));
        h1.appendChild(h1Txt);
        section[i].appendChild(h1);
    }

    //div 요소 테이블 박스(table-wrap) 요소 생성
    for(var i=0; i<this.n; i++){
        var section = document.querySelectorAll('section');
        var div = document.createElement('div');
        div.className = 'table-wrap';
        section[i].appendChild(div);
    }

    //테이블 table 생성 n개
    for(var i=0; i<this.n; i++){ //테이블 table 생성 n개
        var tableBox = document.querySelector('#section'+(i+1)+' .table-wrap');
        var createTable = document.createElement('table');
        createTable.className = 'table';
        tableBox.appendChild(createTable);
    }

    // 각 테이블에 tr 생성 n개

```

```

    for(var i=0; i<this.n; i++){
        var table = document.querySelector('#section' +(i+1)+ ' .table');
        for(var j=0; j<this.m; j++){ // 각 테이블에 tr 생성 n개
            var createTr = document.createElement('tr');
            table.appendChild(createTr);
        }
    }

    // 각 테이블에 td 생성 n개
    for(var i=0; i<this.n; i++){
        var tr = document.querySelectorAll('#section' +(i+1)+ ' .table tr');
        for(var j=0; j<this.m; j++){ // 각 테이블에 td 생성 n개
            for(var k=0; k<this.m; k++){ // 각 테이블에 td 생성 n개
                var createTd = document.createElement('td');
                tr[j].appendChild(createTd);
            }
        }
    }
}

section1(){
    var k=0;
    var table = document.querySelector('#section1 .table')
    for(var i=0; i<this.m; i++){
        for(var j=0; j<this.m; j++){
            k++;
            table.children[i].children[j].textContent=k;
        }
    }
}

section2(){
    var k=Math.pow(this.m,2)+1;
    var table = document.querySelector('#section2 .table')
    for(var i=0; i<this.m; i++){
        for(var j=0; j<this.m; j++){
            k--;

```

```

        table.children[i].children[j].textContent=k;
    }
}
}
section3(){
    var k=0;
    var table = document.querySelector('#section3 .table')
    for(var i=0; i<this.m; i++){
        for(var j=i; j<this.m; j++){
            k++;
            table.children[i].children[j].textContent=k;
        }
    }
}
section4(){
    var k=0;
    var table = document.querySelector('#section4 .table')
    for(var i=0; i<this.m; i++){
        for(var j=0; j<=i; j++){
            k++;
            table.children[i].children[j].textContent=k;
        }
    }
}
section5(){
    var k=0;
    var table = document.querySelector('#section5 .table')
    for(var i=0; i<this.m; i++){
        for(var j=0; j<this.m-i; j++){
            k++;
            table.children[i].children[j].textContent=k;
        }
    }
}
section6(){
    var k=0;

```

```

        var table = document.querySelector('#section6 .table')
        for(var i=0; i<this.m; i++){
            for(var j=(this.m-1)-i; j<this.m; j++){
                k++;
                table.children[i].children[j].textContent=k;
            }
        }
    }
    section7(){
        var k=0;
        var table = document.querySelector('#section7 .table')
        for(var i=0; i<this.m; i++){
            if(i<=(this.m-1)/2){
                for(var j=i; j<this.m-i; j++){ //0~4/1~3/2~2
                    k++;
                    table.children[i].children[j].textContent=k;
                }
            }
            else{
                for(var j=(this.m-1)-i; j<=i; j++){ //1 ~ 3 /0 ~ 4
                    k++;
                    table.children[i].children[j].textContent=k;
                }
            }
        }
    }
    section8(){
        var k=0;
        var table = document.querySelector('#section8 .table')
        //0 : 2~2
        //1 : 1~3
        //2 : 0~4
        //3 : 1~3
        //4 : 2~2
        for(var i=0; i<this.m; i++){
            if( i<=(this.m-1)/2 ){

```

```

        for(var j=((this.m-1)/2)-i; j<Math.round((this.m)/2)+i; j++){ //5개인경우 : 2-0=2, 2+0=2
            k++;
            table.children[i].children[j].textContent=k;
        }
    }
    else{
        for(var j=i-((this.m-1)/2); j<(this.m+(this.m-1)/2)-i; j++){ //5개인경우 : 3-2=1, (칸수+1)6-3=3
            k++;
            table.children[i].children[j].textContent=k;
        }
    }
}

}
section9(){ // ㄱ 모양

    var k=0;
    var table = document.querySelector('#section9 .table')

    for(var i=0; i<this.m; i++){
        if( i%2==0 ){
            for(var j=0; j<this.m; j++){
                k++;
                table.children[i].children[j].textContent=k;
            }
        }
        else{
            for(var j=this.m-1; j>=0; j--){
                k++;
                table.children[i].children[j].textContent=k;
            }
        }
    }

}

}

```

```
        section10(){  
    }  
}  
  
class TableArr extends Arr {  
    init(){  
        super.createTableFn();  
        super.section1();  
        super.section2();  
        super.section3();  
        super.section4();  
        super.section5();  
        super.section6();  
        super.section7();  
        super.section8();  
        super.section9();  
        super.section10();  
    }  
}  
  
const createTableElment = new TableArr(10,10);  
createTableElment.init();
```

</script>

</body>

</html>