

Practice with two-dimensional arrays
All examples are available in my public directory.

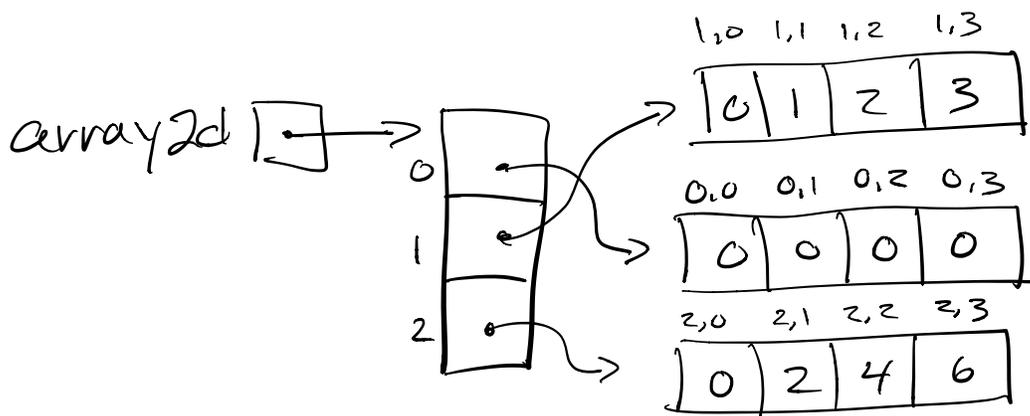
① array1.cpp (static 2d array)

```
int array2d[3][4];  
for (int i=0; i<3; i++) {  
    for (int j=0; j<4; j++) {  
        array[i][j] = i*j;  
    }  
}
```

array2d[0]	→	<table><thead><tr><th>0,0</th><th>0,1</th><th>0,2</th><th>0,3</th></tr></thead><tbody><tr><td>0</td><td>0</td><td>0</td><td>0</td></tr></tbody></table>	0,0	0,1	0,2	0,3	0	0	0	0
0,0	0,1	0,2	0,3							
0	0	0	0							
array2d[1]	→	<table><thead><tr><th>1,0</th><th>1,1</th><th>1,2</th><th>1,3</th></tr></thead><tbody><tr><td>0</td><td>1</td><td>2</td><td>3</td></tr></tbody></table>	1,0	1,1	1,2	1,3	0	1	2	3
1,0	1,1	1,2	1,3							
0	1	2	3							
array2d[2]	→	<table><thead><tr><th>2,0</th><th>2,1</th><th>2,2</th><th>2,3</th></tr></thead><tbody><tr><td>0</td><td>2</td><td>4</td><td>6</td></tr></tbody></table>	2,0	2,1	2,2	2,3	0	2	4	6
2,0	2,1	2,2	2,3							
0	2	4	6							

② array2.cpp (Dynamic 2d array)

```
int** array2d;  
array2d = new int*[3];  
for (int i=0; i<3; i++) {  
    array2d[i] = new int[4];  
    for (int j=0; j<4; j++) {  
        array2d[i][j] = i*j;  
    }  
}
```



③ array3.cpp (Dynamic array storing dynamic objects)

```
Person*** array2d;  
array2d = new Person** [3];  
for (int i=0; i<3; i++) {  
    array2d[i] = new Person* [4];  
    for (int j=0; j<4; j++) {  
        array2d[i][j] = new Person (to-string(i),  
                                     to-string(j));  
    }  
}
```

