

2D Array Model

```
1. Creating 2D Arrays
(always row first, column second)
int[][] board = new int[5][4];
```

```
2. Setting array elements
(always row first, column second)
board[1][2] = 56;
board[2][0] = null;
```

```
3. Accessing array elements
System.out.println( board[1][2] );
System.out.println( board[2][0] );
```

```
4.Traversing and setting 2D arrays using row major
order
(Printing out all elements of 2D array)
for( int row = 0; row < board.length; row++ )
{
  for( int col = 0; col < board[0].length; col++ )
  {
    board[row][col] = row * col;
  } // end inner for
} // end outer for
```

```
5.Traversing 2D arrays using col major order
(Printing out all elements of 2D array)
for( int col = 0; col < board[0].length; col++ )
{
  for( int row = 0; row < board.length; row++ )
  {
    System.out.println( board[row][col] );
  } // end inner for
} // end outer for
```

board has 4 columns
numbered 0 thru 3

board[0].length = 4

		C O L U M N S			
		0	1	2	3
R O W S	0				
	1			56	
	2	null			
	3				
	4				

board has 5 rows
numbered 0 thru 4

board.length = 5