

## Problem Set 3 Exercise #20: Minimum and Maximum Matrix Elements

**Reference:** Lecture 9 notes

**Learning objective:** Two-dimensional array

**Estimated completion time:** 30 minutes

### Problem statement:

Write a program **PS3\_Ex20\_MinMax.java** that prints out the minimum and maximum elements of an integer 2D array.

Your program should contain a static method

```
int[] getMinMax(int[][] mtx)
```

that returns the minimum and maximum matrix elements in **mtx** as a tuple (i.e. array of two elements). The first element of this tuple is the minimum element in **mtx** and the second element is the maximum.

### Sample run #1:

```
Enter the size of the matrix: 4 5
Enter elements row by row:
1 0 1 0 1
0 1 0 1 0
1 0 1 0 1
0 1 0 1 0
Min = 0
Max = 1
```

### Sample run #2:

```
Enter the size of the matrix: 4 6
Enter elements row by row:
67 50 26 3 35 17
50 26 3 35 67 3
26 3 35 50 67 35
3 26 35 50 67 68
Min = 3
Max = 68
```

### Useful tip:

You may copy the input data from the PDF file instead of typing them in manually.