

Write a test program that prompts the user to enter a  $3 \times 3$  matrix of double values and displays a new column-sorted matrix. Here is a sample run:



Enter a 3-by-3 matrix row by row:

0.15 0.875 0.375 ↵ Enter  
0.55 0.005 0.225 ↵ Enter  
0.30 0.12 0.4 ↵ Enter

The column-sorted array is

0.15 0.0050 0.225  
0.3 0.12 0.375  
0.55 0.875 0.4

### 8.28

(*Strictly identical arrays*) The two-dimensional arrays `m1` and `m2` are *strictly identical* if their corresponding elements are equal. Write a method that returns `true` if `m1` and `m2` are strictly identical, using the following header:

```
public static boolean equals(int[][] m1, int[][] m2)
```

Write a test program that prompts the user to enter two  $3 \times 3$  arrays of integers and displays whether the two are strictly identical. Here are the sample runs.



Enter list1: 51 22 25 6 1 4 24 54 6 ↵ Enter  
Enter list2: 51 22 25 6 1 4 24 54 6 ↵ Enter  
The two arrays are strictly identical



Enter list1: 51 25 22 6 1 4 24 54 6 ↵ Enter  
Enter list2: 51 22 25 6 1 4 24 54 6 ↵ Enter  
The two arrays are not strictly identical

### 8.29

(*Identical arrays*) The two-dimensional arrays `m1` and `m2` are *identical* if they have the same contents. Write a method that returns `true` if `m1` and `m2` are identical, using the following header:

```
public static boolean equals(int[][] m1, int[][] m2)
```

Write a test program that prompts the user to enter two  $3 \times 3$  arrays of integers and displays whether the two are identical. Here are the sample runs.



Enter list1: 51 25 22 6 1 4 24 54 6 ↵ Enter  
Enter list2: 51 22 25 6 1 4 24 54 6 ↵ Enter  
The two arrays are identical



Enter list1: 51 5 22 6 1 4 24 54 6 ↵ Enter  
Enter list2: 51 22 25 6 1 4 24 54 6 ↵ Enter  
The two arrays are not identical