6.092 Introduction to Software Engineering in Java
January (IAP) 2009

6.092: Assignment 3

A group of MIT friends decide to run the Boston Marathon. Their performance (in minutes) is printed below.

John   243
Elena   341
Thomas   273
Hamilton 278
Suzie   329
Phil   445
Matt   402
Alex   388
Emma   275
James   334
Jane   412
Emily   393
Daniel   299
Neda   343
Aaron   317
Kate   265

Problem

Find out who is the best performer. Then, find out who is the second-best performer. In each case, print out the name of the participant and his/her performance (in minutes).

Directions

Write a method that takes as input an array of integers and returns the index corresponding to the highest value. Run this method on the array of performance. Print out the name and performance corresponding to the returned index. Then, write a second method to find the second-best performer. The second method should use the first method in order to determine the best performer, and then loop through all values to find out the second-best performer.

Here is a program skeleton to help you get started.

```
class Marathon {
    public static void main (String[] arguments) {
        String names[] = {
            "John", "Elena", "Thomas", "Hamilton", "Suzie", "Phil", "Matt",
            "Alex", "Emma", "James", "Jane", "Emily", "Daniel", "Neda",
            "Aaron", "Kate'
        };

        int times[] = {
            243, 341, 273, 278, 329, 445, 402, 388, 275, 334, 412, 393, 299,
            343, 317, 265
```

```
        };

        for (int i=0; i<names.length; i++) {
            System.out.println(names[i] + " : " + times[i]);
        }
```

Submission Instructions

Submit your file Marathon.java on the Stellar website of the class.

Good luck!