6.092: Assignment 3

A group of MIT friends decide to run the Boston Marathon. Their names and times (in minutes) are below:

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

Problem

Find the fastest runner. Print the name and his/her time (in minutes).

Optional: Find the second fastest runner. Print the name and his/her time (in minutes).

Directions

Write a method that takes as input an array of integers and returns the index corresponding to the person with the lowest time. Run this method on the array of times. Print out the name and time corresponding to the returned index.

Write a second method to find the second-best runner. The second method should use the first method to determine the best runner, and then loop through all values to find the second-best (second lowest) time.

Here is a program skeleton to get started:

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

    int[] times = {
      341, 273, 278, 329, 445, 402, 388, 275, 243, 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` via Stellar.

Good luck!

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