Subject: Running Too Slow, Speed Up from n Squared?
Posted by davidmccoy on Tue, 31 Jan 2017 19:19:38 GMT

So here's a problem- right now I have a functioning integer sort using two stacks and a queue. But I don't think I'm following the algorithm correctly.

For 4 inputs, my program takes one pass (the example in the assignment description takes 2). For 1000 random numbers, it takes 536. For 5000, it takes 3010 (uh-oh). And then at 10,000 random numbers, it has to get killed due to taking way too long.

My interpretation/pseudo-pseudocode of the algorithm goes:

[pseudocode deleted (by jcl) as I would rather students practice their pseudocode development skills]

Any one facing similar issues, struggling to understand the algorithm, or have advice? Does this just happen to be an inefficient algorithm?

Subject: Re: Running Too Slow, Speed Up from n Squared?
Posted by lusth on Wed, 01 Feb 2017 16:56:26 GMT

Great observations. It *is* a Theta(n^2) algorithm.

Subject: Re: Running Too Slow, Speed Up from n Squared?
Posted by davidmccoy on Wed, 01 Feb 2017 17:55:18 GMT

Thank goodness, I was concerned that I had somehow created a monster.