Let $n$ be the count of numbers in a collection of base 10 numbers. Suppose zero is the minimum number and $k$ is the maximum number in the collection. The time complexity of counting sort is

Subject: Re: Question #26 on Algorithms Study Guide (Version 4)
Posted by lusth on Wed, 24 Aug 2016 00:47:52 GMT

This is off the top of my head...

You have to process the array of $n$ numbers, so that takes $\Theta(n)$ time. Then you have to process the counts array, which takes $\Theta(k)$ time. The overall time depends on which is bigger, $n$ or $k$.

Subject: Re: Question #26 on Algorithms Study Guide (Version 4)
Posted by jrmelton on Wed, 24 Aug 2016 02:35:25 GMT

Thank you!