

CS410 Homework - 2

*Disclaimer: You are **not allowed** to use any **pre-defined or built-in functions**. Any helper functions if needed needs to be written as part of the submission. This homework has **2 parts**. Submit a single source file that contains all functions.*

***Question 1 of 2: Checking for sorted-ness:** [50 marks] Write a function along with helper functions as needed, that takes a list of elements as a parameter and checks if the elements are sorted in ascending order.*

Please properly comment your code before submission.

For this part of the assignment, name your function as `chkIfSorted` and include it in the source file **HW2_WSUID.hs. For example, if your user ID is A999B999 name your file as **HW2_A999B999.hs**.**

Sample Test cases:

<u>Test case 1:</u> chkIfSorted [14, 12, 2, 5, 3, 8, 10] Output: False	<u>Test case 2:</u> chkIfSorted [2, 5, 7, 10, 14, 21] Output: True
<u>Test case 3:</u> chkIfSorted [21, 14, 10, 7, 5, 2] Output: False	<u>Test case 4:</u> chkIfSorted [3] Output: True

Second Part in next page:

CS410 Homework - 2

Question 2 of 2: Rank Numbers: [50 marks] Write a function along with helper functions as needed, that takes *three separate numbers* as parameters and returns a list with the elements sorted in ascending order.

Your function declaration would be of the form: ***rankNumbers :: Int -> Int -> Int -> [Int]***

Please properly comment your code before submission.

For this part of the assignment, name your function as **rankNumbers** and include it in the source file **HW2_WSUID.hs**. For example, if your user ID is A999B999 name your file as **HW2_A999B999.hs**.

Sample Test cases:

<u>Test case 1:</u> rankNumbers 14 12 2 Output: [2, 12, 14]	<u>Test case 2:</u> rankNumbers 4 12 2 Output: [2, 4, 12]
<u>Test case 3:</u> chkIfSorted 1 4 9 Output: [1, 4, 9]	<u>Test case 4:</u> chkIfSorted 9 4 1 Output: [1, 4, 9]