Assignment 5 Part II

CS 2000: Python Programming Language

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In this assignment, you will compare time performance of different sorting algorithms. It is worth 5 points and is due (04/04/2018).

1. Implement a recursion function for each (**Bubble**, **Insertion**, and **Quick)** sort algorithms to compare their time performance using [1000, 5000, 10000, 50000, 100000, 200000, 400000] randomly generated values.

2. Use random.randint(a,b) to generate random integer numbers for each list length *N* as follow:

(1<= 1000 <= 1000)

(1<= 5000 <= 5000)

and so on for the rest list lengths.

3. Illustrate your comparison results in a neat graph (using MS Excel charts), displaying **time in seconds** (on y-axis) v/s **list size** (on x-axis). Show all sort algorithms on the same graph.

4. Write a one-page document (including the graph) explaining the comparison results.

5. What to turn in:

(Remember READABILITY COUNTS!)

- A hard copy of your comparison results and your code.

- On e-Learning, submit your Python file whose name <hw#5PartII_LastName.py>. Please format your Python code in the following manner:

Name: <your name here>

Date: <#/#/#>

Homework: <#>

Your code