```
Python 3.6.5 (v3.6.5:f59c0932b4, Mar 28 2018, 17:00:18) [MSC v.1900 64 bit (AMD64)]
on win32
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Tony\Documents\School\199c\coding_assignment1.py =====


---Quicksort---
---Parts (a)(b)---


The mean comparisons of experiments with list size n = 10 is 23.7
The median comparisons of experiments with list size n = 10 is 23.0
The quotient of the mean divided by n log n is 1.0292779221107067
The quotient of the median divided by n log n is 0.998877308377479

The mean comparisons of experiments with list size n = 100 is 644.7
The median comparisons of experiments with list size n = 100 is 651.0
The quotient of the mean divided by n log n is 1.3999482624151323
The quotient of the median divided by n log n is 1.4136285385950846

The mean comparisons of experiments with list size n = 1000 is 10837.5
The median comparisons of experiments with list size n = 1000 is 10830.5
The quotient of the mean divided by n log n is 1.5688888158754972
The quotient of the median divided by n log n is 1.5678754620843898

The mean comparisons of experiments with list size n = 10000 is 157121.6
The median comparisons of experiments with list size n = 10000 is 156560.5
The quotient of the mean divided by n log n is 1.7059260966952494
The quotient of the median divided by n log n is 1.6998340308503515

The mean comparisons of experiments with list size n = 50000 is 947615.5
The median comparisons of experiments with list size n = 50000 is 948527.0
The quotient of the mean divided by n log n is 1.751635708405181
The quotient of the median divided by n log n is 1.7533205858140155

---Part(c)---

The max number of comparisons divided by n log n in a list of n = 30, ran 100000
times  is 2.2639085992230865
>>>
```