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1 C:\Users\Chris\AppData\Local\Microsoft\WindowsApps\
  python3.10.exe C:\Users\Chris\Documents\GitHub\CS-
  3310\Assignments\Assignment_4.py
2 Number of elements in LinkedList:  2303
3
4 *** Linear Search Test ***
5
6 Before sorting:
7 First 5 elements from linked list:
8 284926400, Reversi, 3.5, 284, Kiss The Machine,
  12328960
9 284946595, Morocco, 3.0, 8376, Bayou Games, 674816
10 285755462, Sudoku (Free), 3.5, 190394, Mighty Mighty
  Good Games, 21552128
11 286210009, Sudoku - Classic number puzzle, 3.0, 47,
  OutOfTheBit Ltd, 48672768
12 286313771, Gravitation, 2.5, 35, Robert Farnum,
  6328320
13
14 Single search:
15 Searching for Heroes and Castles...
16 618288607, Heroes and Castles, 3.5, 107, Sergey
  Skosyrev, 71420928
17 Heroes and Castles was found in 791,600 ns
18
19 Multiple linear search:
20 Searching for:
21     ERA HD Deluxe
22     Word Zapper
23     Parking Tycoon - Drag Racing
24     Switchboard - Word Game
25     Burn Man : The Survival of Scary and Terrifying
26     World Invasion
27     Royal Offense
28     Jurassic Pixel Dinosaur Craft
29     Somalia Game
30     Twitchy Thrones
31
32 Average linear search time of gamesLinkedList across
  10 iterations is:
33     474,830 ns
```

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34
35
36 *** Binary Search Test ***
37
38 Time for insertion_sort: 26,063,542,700 ns
39 Time for quick_sort: 481,092,000 ns
40
41 After sorting:
42 First 5 elements from linked list:
43 432022189, #Lost in Space, 3.0, 20, Deca Games E00D,
    131874816
44 905197630, 1 - 100, 4.0, 55, TapMedia Ltd, 55102464
45 356086906, 1 2 25, 3.0, 13433, Team17 Software Ltd,
    529755136
46 635607850, 1,000,000+ Skins Creator for Minecraft
    Edition, 4.5, 8828, manastone inc., 72614912
47 405430582, 10-in-1 Board Games BA.net, 2.5, 109,
    Tyflos Accessible Software, 7204864
48
49 Multiple binary search:
50 Searching for:
51     ERA HD Deluxe
52     Word Zapper
53     Parking Tycoon - Drag Racing
54     Switchboard - Word Game
55     Burn Man : The Survival of Scary and Terrifying
56     World Invasion
57     Royal Offense
58     Jurassic Pixel Dinosaur Craft
59     Somalia Game
60     Twitchy Thrones
61
62 Average binary search time of gamesLinkedList across
    10 iterations is:
63     386,840 ns
64
65
66 *** Breakpoint Test ***
67
68 Time for list: 304,400 ns
69
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70 Average binary search time of gamesPrimitiveList
    across 10 iterations is:
71     7,290 ns
72
73 Break point m = 1029 between repeated linear
    searches and sort-once & multiple binary searches.
74
75 Process finished with exit code 0
76
```