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1  /*****
2  * AUTHOR          : Nick Reardon
3  * Assignment #8   : Skip Lists
4  * CLASS           : CS1D
5  * SECTION         : MW - 2:30p
6  * DUE DATE        : 03 / 25 / 20
7  *****/
8  #include "main.h"
9  using std::cout; using std::endl;
10
11
12  int main()
13  {
14
15      /*
16       * HEADER OUTPUT
17       */
18      PrintHeader(cout, "Prompt.txt");
19
20      /*****/
21
22      SkipList skipList(.6f, 16);
23
24      cout << "Inserting: 18, 41, 22, 44" << endl;
25      skipList.insert(18, "San Clemente");
26      skipList.insert(41, "Mission Viejo");
27      skipList.insert(22, "Laguna Niguel");
28      skipList.insert(44, "Irvine");
29
30      //skipList.print();
31
32      //DELETE KEY 18
33      cout << "Erasing 18" << endl;
34      skipList.erase(18);
35
36      //skipList.print();
37
38      cout << "Inserting: 58, 32, 49" << endl;
39      skipList.insert(58, "Lake Forest");
40      skipList.insert(32, "San Diego");
41      skipList.insert(49, "Anaheim");
42
43      //skipList.print();
44
45      //DELETE KEY 58
46      cout << "Erasing 58" << endl;
47      skipList.erase(58);
48
49      //skipList.print();
50
51      cout << "Inserting: 31, 17, 72, 41" << endl;
52      skipList.insert(31, "Los Angeles");
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53     skipList.insert(17, "Orange");
54     skipList.insert(72, "Palms Springs");
55     skipList.insert(41, "Riverside");
56
57     //skipList.print();
58
59     //DELETE KEY 49
60     cout << "Erasing 49" << endl;
61     skipList.erase(49);
62
63     //skipList.print();
64     cout << "Inserting: 19, 60, 35, 103, 11, 18, 22, 49" << endl;
65     skipList.insert(19, "Brea");
66     skipList.insert(60, "Santa Ana");
67     skipList.insert(35, "Tustin");
68     skipList.insert(103, "Oceanside");
69     skipList.insert(11, "La Jolla");
70     skipList.insert(18, "Del Mar");
71     skipList.insert(22, "Aliso Viejo");
72     skipList.insert(49, "Laguna Beach");
73
74     //skipList.print();
75
76     //DELETE KEY 41
77     cout << "Erasing 41" << endl;
78     skipList.erase(41);
79
80     //skipList.print();
81
82     cout << "Inserting: 42, 49, 99, 29, 88, 41, 62" << endl;
83     skipList.insert(42, "Vista");
84     skipList.insert(49, "San Diego");
85     skipList.insert(99, "San Juan");
86     skipList.insert(29, "Dana Point");
87     skipList.insert(88, "El Segundo");
88     skipList.insert(41, "San Clemente");
89     skipList.insert(62, "Laguna Hills");
90
91     skipList.print();
92
93     skipList.printLevels();
94
95     std::cout << "Find value by key 41" << endl
96         << "Resulting value: " << *skipList.find(41) << endl << endl;
97
98     std::cout << "Calling size() method" << endl
99         << "Resulting value: " << skipList.size() << endl << endl;
100
101     system("pause");
102     return 0;
103 }
104
```