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1 C:\Users\viswa\PycharmProjects\pythonProject2\venv\
  Scripts\python.exe C:\Users\viswa\AppData\Local\
  Programs\Python\Python310\Tools\IndexedAvl.py
2 -----
3 -----MENU-----
4 --- 1: Insert data from excel      ---
5 --- 2: Delete data from memory    ---
6 --- 3: Search data from memory    ---
7 --- 4: Get value from indices     ---
8 --- 5: Get Indices from values    ---
9 --- 6: Print Inorder Traversal    ---
10 --- 7: Print Preorder Traversal   ---
11 --- 8: Print Postorder Traversal  ---
12 --- 9: Print levelorder Traversal ---
13 --- 10: Print Time for opertion   ---
14 -----
15 -----
16 Enter your option 1
17 Press 0 to go back to menu or any integer to exit 0
18 -----
19 -----MENU-----
20 --- 1: Insert data from excel      ---
21 --- 2: Delete data from memory    ---
22 --- 3: Search data from memory    ---
23 --- 4: Get value from indices     ---
24 --- 5: Get Indices from values    ---
25 --- 6: Print Inorder Traversal    ---
26 --- 7: Print Preorder Traversal   ---
27 --- 8: Print Postorder Traversal  ---
28 --- 9: Print levelorder Traversal ---
29 --- 10: Print Time for opertion   ---
30 -----
31 -----
32 Enter your option 6
33 2 6 7 10 12 13 16 17 19 22 23 25 28 29 30 32 34 36 39
   40 43 44 47 48 49 50 51 52 56 61 62 66 67 68 69 70
   71 72 76 80 81 83 84 87 88 90 92 94 95 96 97
34 Press 0 to go back to menu or any integer to exit 0
35 -----
36 -----MENU-----
37 --- 1: Insert data from excel      ---

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38 --- 2: Delete data from memory    ---
39 --- 3: Search data from memory    ---
40 --- 4: Get value from indices     ---
41 --- 5: Get Indices from values    ---
42 --- 6: Print Inorder Traversal    ---
43 --- 7: Print Preorder Traversal   ---
44 --- 8: Print Postorder Traversal  ---
45 --- 9: Print levelorder Traversal ---
46 --- 10: Print Time for opertion   ---
47 -----
48 -----
49 Enter your option 7
50 50 2 6 7 10 12 13 16 17 19 22 23 25 28 29 30 32 34 36
    39 40 43 44 47 48 49 51 52 56 61 62 66 67 68 69 70
    71 72 76 80 81 83 84 87 88 90 92 94 95 96 97
51 Press 0 to go back to menu or any integer to exit 0
52 -----
53 -----MENU-----
54 --- 1: Insert data from excel     ---
55 --- 2: Delete data from memory    ---
56 --- 3: Search data from memory    ---
57 --- 4: Get value from indices     ---
58 --- 5: Get Indices from values    ---
59 --- 6: Print Inorder Traversal    ---
60 --- 7: Print Preorder Traversal   ---
61 --- 8: Print Postorder Traversal  ---
62 --- 9: Print levelorder Traversal ---
63 --- 10: Print Time for opertion   ---
64 -----
65 -----
66 Enter your option 8
67 2 6 7 10 12 13 16 17 19 22 23 25 28 29 30 32 34 36 39
    40 43 44 47 48 49 51 52 56 61 62 66 67 68 69 70 71
    72 76 80 81 83 84 87 88 90 92 94 95 96 97 50
68 Press 0 to go back to menu or any integer to exit 0
69 -----
70 -----MENU-----
71 --- 1: Insert data from excel     ---
72 --- 2: Delete data from memory    ---
73 --- 3: Search data from memory    ---
74 --- 4: Get value from indices     ---

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75 --- 5: Get Indices from values ---
76 --- 6: Print Inorder Traversal ---
77 --- 7: Print Preorder Traversal ---
78 --- 8: Print Postorder Traversal ---
79 --- 9: Print levelorder Traversal ---
80 --- 10: Print Time for opertion ---
81 -----
82 -----
83 Enter your option 9
84 50 28 76 16 40 67 90 10 22 34 47 61 70 84 95 6 13 19
    25 30 39 44 49 52 66 69 72 81 88 94 97 2 7 12 17 23
    29 32 36 43 48 51 56 62 68 71 80 83 87 92 96
85 Press 0 to go back to menu or any integer to exit 0
86 -----
87 -----MENU-----
88 --- 1: Insert data from excel ---
89 --- 2: Delete data from memory ---
90 --- 3: Search data from memory ---
91 --- 4: Get value from indices ---
92 --- 5: Get Indices from values ---
93 --- 6: Print Inorder Traversal ---
94 --- 7: Print Preorder Traversal ---
95 --- 8: Print Postorder Traversal ---
96 --- 9: Print levelorder Traversal ---
97 --- 10: Print Time for opertion ---
98 -----
99 -----
100 Enter your option 2
101 Enter your value to be removed 17
102 Press 0 to go back to menu or any integer to exit 0
103 -----
104 -----MENU-----
105 --- 1: Insert data from excel ---
106 --- 2: Delete data from memory ---
107 --- 3: Search data from memory ---
108 --- 4: Get value from indices ---
109 --- 5: Get Indices from values ---
110 --- 6: Print Inorder Traversal ---
111 --- 7: Print Preorder Traversal ---
112 --- 8: Print Postorder Traversal ---
113 --- 9: Print levelorder Traversal ---

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114 --- 10: Print Time for opertion   ---
115 -----
116 -----
117 Enter your option 6
118 2 6 7 10 12 13 16 19 22 23 25 28 29 30 32 34 36 39
    40 43 44 47 48 49 50 51 52 56 61 62 66 67 68 69 70
    71 72 76 80 81 83 84 87 88 90 92 94 95 96 97
119 Press 0 to go back to menu or any integer to exit 0
120 -----
121 -----MENU-----
122 --- 1: Insert data from excel     ---
123 --- 2: Delete data from memory   ---
124 --- 3: Search data from memory    ---
125 --- 4: Get value from indices     ---
126 --- 5: Get Indices from values    ---
127 --- 6: Print Inorder Traversal    ---
128 --- 7: Print Preorder Traversal   ---
129 --- 8: Print Postorder Traversal  ---
130 --- 9: Print levelorder Traversal ---
131 --- 10: Print Time for opertion   ---
132 -----
133 -----
134 Enter your option 7
135 51 2 6 7 10 12 13 16 19 22 23 25 28 29 30 32 34 36
    39 40 43 44 47 48 49 50 52 56 61 62 66 67 68 69 70
    71 72 76 80 81 83 84 87 88 90 92 94 95 96 97
136 Press 0 to go back to menu or any integer to exit 0
137 -----
138 -----MENU-----
139 --- 1: Insert data from excel     ---
140 --- 2: Delete data from memory   ---
141 --- 3: Search data from memory    ---
142 --- 4: Get value from indices     ---
143 --- 5: Get Indices from values    ---
144 --- 6: Print Inorder Traversal    ---
145 --- 7: Print Preorder Traversal   ---
146 --- 8: Print Postorder Traversal  ---
147 --- 9: Print levelorder Traversal ---
148 --- 10: Print Time for opertion   ---
149 -----
150 -----

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151 Enter your option 2
152 Enter your value to be removed 51
153 Press 0 to go back to menu or any integer to exit 0
154 -----
155 -----MENU-----
156 --- 1: Insert data from excel      ---
157 --- 2: Delete data from memory    ---
158 --- 3: Search data from memory    ---
159 --- 4: Get value from indices      ---
160 --- 5: Get Indices from values     ---
161 --- 6: Print Inorder Traversal    ---
162 --- 7: Print Preorder Traversal   ---
163 --- 8: Print Postorder Traversal  ---
164 --- 9: Print levelorder Traversal ---
165 --- 10: Print Time for opertion   ---
166 -----
167 -----
168 Enter your option 7
169 50 2 6 7 10 12 13 16 19 22 23 25 28 29 30 32 34 36
    39 40 43 44 47 48 49 52 56 61 62 66 67 68 69 70 71
    72 76 80 81 83 84 87 88 90 92 94 95 96 97
170 Press 0 to go back to menu or any integer to exit 0
171 -----
172 -----MENU-----
173 --- 1: Insert data from excel      ---
174 --- 2: Delete data from memory    ---
175 --- 3: Search data from memory    ---
176 --- 4: Get value from indices      ---
177 --- 5: Get Indices from values     ---
178 --- 6: Print Inorder Traversal    ---
179 --- 7: Print Preorder Traversal   ---
180 --- 8: Print Postorder Traversal  ---
181 --- 9: Print levelorder Traversal ---
182 --- 10: Print Time for opertion   ---
183 -----
184 -----
185 Enter your option 6
186 2 6 7 10 12 13 16 19 22 23 25 28 29 30 32 34 36 39
    40 43 44 47 48 49 50 52 56 61 62 66 67 68 69 70 71
    72 76 80 81 83 84 87 88 90 92 94 95 96 97
187 Press 0 to go back to menu or any integer to exit 0

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188 -----
189 -----MENU-----
190 --- 1: Insert data from excel    ---
191 --- 2: Delete data from memory  ---
192 --- 3: Search data from memory  ---
193 --- 4: Get value from indices   ---
194 --- 5: Get Indices from values  ---
195 --- 6: Print Inorder Traversal  ---
196 --- 7: Print Preorder Traversal ---
197 --- 8: Print Postorder Traversal ---
198 --- 9: Print levelorder Traversal ---
199 --- 10: Print Time for opertion  ---
200 -----
201 -----
202 Enter your option 4
203 Enter index40
204 84
205 Press 0 to go back to menu or any integer to exit 0
206 -----
207 -----MENU-----
208 --- 1: Insert data from excel    ---
209 --- 2: Delete data from memory  ---
210 --- 3: Search data from memory  ---
211 --- 4: Get value from indices   ---
212 --- 5: Get Indices from values  ---
213 --- 6: Print Inorder Traversal  ---
214 --- 7: Print Preorder Traversal ---
215 --- 8: Print Postorder Traversal ---
216 --- 9: Print levelorder Traversal ---
217 --- 10: Print Time for opertion  ---
218 -----
219 -----
220 Enter your option 4
221 Enter index20
222 44
223 Press 0 to go back to menu or any integer to exit 0
224 -----
225 -----MENU-----
226 --- 1: Insert data from excel    ---
227 --- 2: Delete data from memory  ---
228 --- 3: Search data from memory  ---

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229 --- 4: Get value from indices ---
230 --- 5: Get Indices from values ---
231 --- 6: Print Inorder Traversal ---
232 --- 7: Print Preorder Traversal ---
233 --- 8: Print Postorder Traversal ---
234 --- 9: Print levelorder Traversal ---
235 --- 10: Print Time for opertion ---
236 -----
237 -----
238 Enter your option 5
239 Enter value44
240 20
241 Press 0 to go back to menu or any integer to exit 0
242 -----
243 -----MENU-----
244 --- 1: Insert data from excel ---
245 --- 2: Delete data from memory ---
246 --- 3: Search data from memory ---
247 --- 4: Get value from indices ---
248 --- 5: Get Indices from values ---
249 --- 6: Print Inorder Traversal ---
250 --- 7: Print Preorder Traversal ---
251 --- 8: Print Postorder Traversal ---
252 --- 9: Print levelorder Traversal ---
253 --- 10: Print Time for opertion ---
254 -----
255 -----
256 Enter your option 10
257 Average Insertion Time: 2.02290580002591
258 Average Search Time: 0.001367799995932728
259 Average Height Time: 0.2958925999701023
260 Press 0 to go back to menu or any integer to exit 5
261
262 Process finished with exit code 0
263
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