

```

1 C:\Users\lilia\anaconda3\python.exe "C:\Program Files
  \JetBrains\PyCharm 2020.2.1\plugins\python\helpers\
  pydev\pydevconsole.py" --mode=client --port=57216
2
3 import sys; print('Python %s on %s' % (sys.version,
  sys.platform))
4 sys.path.extend(['C:\\Users\\lilia\\Downloads\\
  npuzzle_r1', 'C:/Users/lilia/Downloads/npuzzle_r1'])
5
6 Python 3.8.3 (default, Jul  2 2020, 17:30:36) [MSC v.
  1916 64 bit (AMD64)]
7 Type 'copyright', 'credits' or 'license' for more
  information
8 IPython 7.16.1 -- An enhanced Interactive Python.
  Type '?' for help.
9 PyDev console: using IPython 7.16.1
10
11 Python 3.8.3 (default, Jul  2 2020, 17:30:36) [MSC v.
  1916 64 bit (AMD64)] on win32
12 In[2]: runfile('C:/Users/lilia/Downloads/npuzzle_r1/
  tiledriver.py', wdir='C:/Users/lilia/Downloads/
  npuzzle_r1')
13 1
14      0      1      2
15 0      5      7      .
16 1      8      3      6
17 2      4      2      1
18 Bread First Search
19 -----
  -----
20 Death First Search
21 -----
  -----
22 2
23      0      1      2
24 0      7      2      5
25 1      6      4      8
26 2      3      .      1
27 Bread First Search
28 -----
  -----
29 Death First Search
30 -----
  -----

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31 3
32      0      1      2
33 0      8      5      2
34 1      3      1      6
35 2      4      7      .
36 Bread First Search
37 -----
   -----
38 Death First Search
39 -----
   -----
40 4
41      0      1      2
42 0      8      1      7
43 1      6      2      4
44 2      5      .      3
45 Bread First Search
46 -----
   -----
47 Death First Search
48 -----
   -----
49 5
50      0      1      2
51 0      4      .      1
52 1      5      8      7
53 2      2      3      6
54 Bread First Search
55 -----
   -----
56 Death First Search
57 -----
   -----
58 6
59      0      1      2
60 0      .      3      1
61 1      7      5      2
62 2      4      6      8
63 Bread First Search
64 -----
   -----
65 Death First Search
66 -----
   -----

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67 7
68      0      1      2
69 0      7      .      5
70 1      8      3      2
71 2      6      1      4
72 Bread First Search
73 -----
   -----
74 Death First Search
75 -----
   -----
76 8
77      0      1      2
78 0      .      6      4
79 1      8      7      5
80 2      2      3      1
81 Bread First Search
82 -----
   -----
83 Death First Search
84 -----
   -----
85 9
86      0      1      2
87 0      3      2      .
88 1      5      6      8
89 2      4      7      1
90 Bread First Search
91 -----
   -----
92 Death First Search
93 -----
   -----
94 10
95      0      1      2
96 0      1      .      4
97 1      2      6      5
98 2      7      3      8
99 Bread First Search
100 -----
   -----
101 Death First Search
102 -----
   -----

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```

103 11
104      0      1      2
105 0      .      4      7
106 1      5      8      1
107 2      2      6      3
108 Bread First Search
109 -----
-----

110 Death First Search
111 -----
-----

112 12
113      0      1      2
114 0      8      4      6
115 1      .      1      3
116 2      5      2      7
117 Bread First Search
118 -----
-----

119 Death First Search
120 -----
-----

121 13
122      0      1      2
123 0      6      7      .
124 1      3      1      4
125 2      5      2      8
126 Bread First Search
127 -----
-----

128 Death First Search
129 -----
-----

130 14
131      0      1      2
132 0      .      8      6
133 1      7      4      2
134 2      3      1      5
135 Bread First Search
136 -----
-----

137 Death First Search
138 -----
-----

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139 15

140           0           1           2

141 0           7           .           5

142 1           1           2           4

143 2           8           6           3

144 Bread First Search

145 -----

-----

146 Death First Search

147 -----

-----

148 16

149           0           1           2

150 0           1           3           5

151 1           7           2           4

152 2           .           6           8

153 Bread First Search

154 -----

-----

155 Death First Search

156 -----

-----

157 17

158           0           1           2

159 0           7           5           4

160 1           .           3           8

161 2           6           1           2

162 Bread First Search

163 -----

-----

164 Death First Search

165 -----

-----

166 18

167           0           1           2

168 0           .           7           2

169 1           4           1           5

170 2           8           3           6

171 Bread First Search

172 -----

-----

173 Death First Search

174 -----

-----

175 19

176           0           1           2

177 0       8       2       4

178 1       7       6       1

179 2       5       .       3

180 Bread First Search

181 -----  
-----

182 Death First Search

183 -----  
-----

184 20

185           0           1           2

186 0       8       4       3

187 1       6       7       .

188 2       1       2       5

189 Bread First Search

190 -----  
-----

191 Death First Search

192 -----  
-----

193 21

194           0           1           2

195 0       7       5       2

196 1       .       4       8

197 2       3       6       1

198 Bread First Search

199 -----  
-----

200 Death First Search

201 -----  
-----

202 22

203           0           1           2

204 0       .       3       5

205 1       4       2       6

206 2       8       7       1

207 Bread First Search

208 -----  
-----

209 Death First Search

210 -----  
-----

```

211 23
212      0      1      2
213 0      1      3      6
214 1      8      4      2
215 2      7      .      5
216 Bread First Search
217 -----
    -----
218 Death First Search
219 -----
    -----
220 24
221      0      1      2
222 0      6      8      3
223 1      5      7      2
224 2      1      .      4
225 Bread First Search
226 -----
    -----
227 Death First Search
228 -----
    -----
229 25
230      0      1      2
231 0      3      4      1
232 1      .      6      8
233 2      2      7      5
234 Bread First Search
235 -----
    -----
236 Death First Search
237 -----
    -----
238 26
239      0      1      2
240 0      4      1      8
241 1      5      .      3
242 2      2      7      6
243 Bread First Search
244 -----
    -----
245 Death First Search
246 -----
    -----

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```
247 27
248      0      1      2
249 0      5      7      .
250 1      8      6      4
251 2      3      2      1
252 Bread First Search
253 -----
-----
254 Death First Search
255 -----
-----
256 28
257      0      1      2
258 0      6      8      3
259 1      7      2      5
260 2      1      4      .
261 Bread First Search
262 -----
-----
263 Death First Search
264 -----
-----
265 29
266      0      1      2
267 0      8      6      1
268 1      7      3      5
269 2      4      .      2
270 Bread First Search
271 -----
-----
272 Death First Search
273 -----
-----
274 30
275      0      1      2
276 0      8      1      .
277 1      4      5      7
278 2      6      2      3
279 Bread First Search
280 -----
-----
281 Death First Search
282 -----
-----
```



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283 31
284      0      1      2
285 0      7      6      1
286 1      4      .      3
287 2      8      2      5
288 Bread First Search
289 -----
-----
290 Death First Search
291 -----
-----
292      Length of Plan      Number of Nodes
      Elapsed Time(s)
293 -----
-----
294 Mean:      67.64516129032258
      295243.3548387097      58.
      23435558064516
295 STD:      8.514882606733437
      148930.28793198254      34.
      50828410483344
296

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