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1 C:\Users\paney\anaconda3\envs\AI\python.exe C:\Users\
  paney\Documents\Studies\AI_Class\Assignment_3\
  environment.py
2 loading config.yaml file...
3
4 Choose one of the following options:
5 1. Print network
6 2. Reset evidence list to empty
7 3. Add evidence to the evidence list
8 4. Print the evidence list
9 5. Do probabilistic reasoning
10 6. Quit
11 Enter your choice: 1
12 WEATHER:
13     P(mild) = 0.10
14     P(stormy) = 0.40
15     P(extreme) = 0.50
16
17 VERTEX 1:
18     P(blocked|mild) = 0.20
19     P(blocked|stormy) = 0.40
20     P(blocked|extreme) = 0.60
21
22     P(evacuees|not bv1, not bv2) = 0.00
23     P(evacuees|bv1, not bv2) = 0.70
24     P(evacuees|bv2, not bv1) = 0.80
25     P(evacuees|bv1, bv2) = 0.94
26 VERTEX 2:
27     P(blocked|mild) = 0.30
28     P(blocked|stormy) = 0.60
29     P(blocked|extreme) = 0.90
30
31     P(evacuees|not bv2, not bv1, not bv3, not bv4) =
    0.00
32     P(evacuees|bv2, not bv1, not bv3, not bv4) = 0.70
33     P(evacuees|bv1, not bv2, not bv3, not bv4) = 0.80
34     P(evacuees|bv3, not bv2, not bv1, not bv4) = 0.40
35     P(evacuees|bv4, not bv2, not bv1, not bv3) = 0.20
36     P(evacuees|bv2, bv1, not bv3, not bv4) = 0.94
37     P(evacuees|bv2, bv3, not bv1, not bv4) = 0.82
38     P(evacuees|bv2, bv4, not bv1, not bv3) = 0.76
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39     P(evacuees|bv1, bv3, not bv2, not bv4) = 0.88
40     P(evacuees|bv1, bv4, not bv2, not bv3) = 0.84
41     P(evacuees|bv3, bv4, not bv2, not bv1) = 0.52
42     P(evacuees|bv2, bv1, bv3, not bv4) = 0.96
43     P(evacuees|bv2, bv1, bv4, not bv3) = 0.95
44     P(evacuees|bv2, bv3, bv4, not bv1) = 0.86
45     P(evacuees|bv1, bv3, bv4, not bv2) = 0.90
46     P(evacuees|bv2, bv1, bv3, bv4) = 0.97
47 VERTEX 3:
48     P(blocked|mild) = 0.00
49     P(blocked|stormy) = 0.00
50     P(blocked|extreme) = 0.00
51
52     P(evacuees|not bv3, not bv2, not bv4) = 0.00
53     P(evacuees|bv3, not bv2, not bv4) = 0.70
54     P(evacuees|bv2, not bv3, not bv4) = 0.40
55     P(evacuees|bv4, not bv3, not bv2) = 0.40
56     P(evacuees|bv3, bv2, not bv4) = 0.82
57     P(evacuees|bv3, bv4, not bv2) = 0.82
58     P(evacuees|bv2, bv4, not bv3) = 0.64
59     P(evacuees|bv3, bv2, bv4) = 0.89
60 VERTEX 4:
61     P(blocked|mild) = 0.00
62     P(blocked|stormy) = 0.00
63     P(blocked|extreme) = 0.00
64
65     P(evacuees|not bv4, not bv3, not bv2) = 0.00
66     P(evacuees|bv4, not bv3, not bv2) = 0.70
67     P(evacuees|bv3, not bv4, not bv2) = 0.40
68     P(evacuees|bv2, not bv4, not bv3) = 0.20
69     P(evacuees|bv4, bv3, not bv2) = 0.82
70     P(evacuees|bv4, bv2, not bv3) = 0.76
71     P(evacuees|bv3, bv2, not bv4) = 0.52
72     P(evacuees|bv4, bv3, bv2) = 0.86
73
74
75 Choose one of the following options:
76 1. Print network
77 2. Reset evidence list to empty
78 3. Add evidence to the evidence list
79 4. Print the evidence list
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80 5. Do probabilistic reasoning
81 6. Quit
82 Enter your choice: 5
83 Choose one of the following query types:
84 1) What is the probability that each of the vertices
    contains evacuees?
85 2) What is the probability that each of the vertices
    is blocked?
86 3) What is the distribution of the weather variable?
87 4) What is the probability that a certain path (set
    of edges) is free from blockages?
88 Enter your choice: 1
89 Type vertices ids: 1
90 -> The probability is: 0.704
91
92 Choose one of the following options:
93 1. Print network
94 2. Reset evidence list to empty
95 3. Add evidence to the evidence list
96 4. Print the evidence list
97 5. Do probabilistic reasoning
98 6. Quit
99 Enter your choice: 5
100 Choose one of the following query types:
101 1) What is the probability that each of the vertices
    contains evacuees?
102 2) What is the probability that each of the vertices
    is blocked?
103 3) What is the distribution of the weather variable?
104 4) What is the probability that a certain path (set
    of edges) is free from blockages?
105 Enter your choice: 1
106 Type vertices ids: 3, 4
107 -> The probability is: 0.058
108
109 Choose one of the following options:
110 1. Print network
111 2. Reset evidence list to empty
112 3. Add evidence to the evidence list
113 4. Print the evidence list
114 5. Do probabilistic reasoning
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115 6. Quit
116 Enter your choice: 5
117 Choose one of the following query types:
118 1) What is the probability that each of the vertices
    contains evacuees?
119 2) What is the probability that each of the vertices
    is blocked?
120 3) What is the distribution of the weather variable?
121 4) What is the probability that a certain path (set
    of edges) is free from blockages?
122 Enter your choice: 2
123 Type vertices ids: 2
124 -> The probability is: 0.72
125
126 Choose one of the following options:
127 1. Print network
128 2. Reset evidence list to empty
129 3. Add evidence to the evidence list
130 4. Print the evidence list
131 5. Do probabilistic reasoning
132 6. Quit
133 Enter your choice: 5
134 Choose one of the following query types:
135 1) What is the probability that each of the vertices
    contains evacuees?
136 2) What is the probability that each of the vertices
    is blocked?
137 3) What is the distribution of the weather variable?
138 4) What is the probability that a certain path (set
    of edges) is free from blockages?
139 Enter your choice: 3
140 -> The distribution is: {'mild',): 0.1, ('stormy
    ',): 0.4, ('extreme',): 0.5}
141
142 Choose one of the following options:
143 1. Print network
144 2. Reset evidence list to empty
145 3. Add evidence to the evidence list
146 4. Print the evidence list
147 5. Do probabilistic reasoning
148 6. Quit
```

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149 Enter your choice: 5
150 Choose one of the following query types:
151 1) What is the probability that each of the vertices
    contains evacuees?
152 2) What is the probability that each of the vertices
    is blocked?
153 3) What is the distribution of the weather variable?
154 4) What is the probability that a certain path (set
    of edges) is free from blockages?
155 Enter your choice: 4
156 Type edges ids: 2, 3, 4
157 -> The probability is: 0.28
158
159 Choose one of the following options:
160 1. Print network
161 2. Reset evidence list to empty
162 3. Add evidence to the evidence list
163 4. Print the evidence list
164 5. Do probabilistic reasoning
165 6. Quit
166 Enter your choice: 3
167
168 Enter a variable and its value to add to the
    evidence list
169 Example: BV1, not bv1
170 Enter empty string to exit
171 Enter: BV2, not bv2
172 -> Added (BV2, not bv2) to the evidence list
173
174 Enter a variable and its value to add to the
    evidence list
175 Example: BV1, not bv1
176 Enter empty string to exit
177 Enter: BV3, bv3
178 -> Added (BV3, bv3) to the evidence list
179
180 Enter a variable and its value to add to the
    evidence list
181 Example: BV1, not bv1
182 Enter empty string to exit
183 Enter:
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184
185 Choose one of the following options:
186 1. Print network
187 2. Reset evidence list to empty
188 3. Add evidence to the evidence list
189 4. Print the evidence list
190 5. Do probabilistic reasoning
191 6. Quit
192 Enter your choice: 5
193 Choose one of the following query types:
194 1) What is the probability that each of the vertices
    contains evacuees?
195 2) What is the probability that each of the vertices
    is blocked?
196 3) What is the distribution of the weather variable?
197 4) What is the probability that a certain path (set
    of edges) is free from blockages?
198 Enter your choice: 1
199 Type vertices ids: 1
200 -> The probability is: 0.0
201
202 Choose one of the following options:
203 1. Print network
204 2. Reset evidence list to empty
205 3. Add evidence to the evidence list
206 4. Print the evidence list
207 5. Do probabilistic reasoning
208 6. Quit
209 Enter your choice: 5
210 Choose one of the following query types:
211 1) What is the probability that each of the vertices
    contains evacuees?
212 2) What is the probability that each of the vertices
    is blocked?
213 3) What is the distribution of the weather variable?
214 4) What is the probability that a certain path (set
    of edges) is free from blockages?
215 Enter your choice: 2
216 Type vertices ids: 2
217 -> The probability is: 0.0
218
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219 Choose one of the following options:
220 1. Print network
221 2. Reset evidence list to empty
222 3. Add evidence to the evidence list
223 4. Print the evidence list
224 5. Do probabilistic reasoning
225 6. Quit
226 Enter your choice: 5
227 Choose one of the following query types:
228 1) What is the probability that each of the vertices
    contains evacuees?
229 2) What is the probability that each of the vertices
    is blocked?
230 3) What is the distribution of the weather variable?
231 4) What is the probability that a certain path (set
    of edges) is free from blockages?
232 Enter your choice: 3
233 -> The distribution is: {'mild',): 0.0, ('stormy
    ',): 0.0, ('extreme',): 0.0}
234
235 Choose one of the following options:
236 1. Print network
237 2. Reset evidence list to empty
238 3. Add evidence to the evidence list
239 4. Print the evidence list
240 5. Do probabilistic reasoning
241 6. Quit
242 Enter your choice: 5
243 Choose one of the following query types:
244 1) What is the probability that each of the vertices
    contains evacuees?
245 2) What is the probability that each of the vertices
    is blocked?
246 3) What is the distribution of the weather variable?
247 4) What is the probability that a certain path (set
    of edges) is free from blockages?
248 Enter your choice: 4
249 Type edges ids: 1, 2, 3
250 -> The probability is: 0.0
251
252 Choose one of the following options:
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```
253 1. Print network
254 2. Reset evidence list to empty
255 3. Add evidence to the evidence list
256 4. Print the evidence list
257 5. Do probabilistic reasoning
258 6. Quit
259 Enter your choice: 5
260 Choose one of the following query types:
261 1) What is the probability that each of the vertices
    contains evacuees?
262 2) What is the probability that each of the vertices
    is blocked?
263 3) What is the distribution of the weather variable?
264 4) What is the probability that a certain path (set
    of edges) is free from blockages?
265 Enter your choice: 4
266 Type edges ids: 1, 2, 4
267 -> The probability is: 0.0
268
269 Choose one of the following options:
270 1. Print network
271 2. Reset evidence list to empty
272 3. Add evidence to the evidence list
273 4. Print the evidence list
274 5. Do probabilistic reasoning
275 6. Quit
276 Enter your choice: 6
277
278 Bye!
279
280 Process finished with exit code 0
281
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