```
 1  C:\Users\Julia\AppData\Local\Programs\Python\Python38-32\python.exe C:/CS363_AI/CS363_Artificial_Intelligence_Repo/HW2/hw2.py
 2  Console output is saving to: C:\CS363_AI\CS363_Artificial_Intelligence_Repo\HW2
 3  filename hw2dataset_10.txt
 4  Provided
 5  P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
 6       0.7            0.8                  0.4                  0.7                  0.3
 7  total iterations: 5
 8  ---------------------------------Gender Table---------------------------------
 9  P(Gender=0)  P(Gender=1)
10    0.726477   0.273523
11
12
13  ------------------------------Weight|Gender Table------------------------------
14  P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
15      0.862349              0.137651              0.634399              0.365601
16
17
18  ------------------------------Height|Gender Table------------------------------
19  P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
20      0.688252              0.311748          4.480958e-07              1.0
21
22
23  Test Case #1
24  P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
25      0.383271              0.511622              0.027045              0.465921              0.96269
26  total iterations: 5
27  ---------------------------------Gender Table---------------------------------
28  P(Gender=0)  P(Gender=1)
29    0.726481   0.273519
30
31
32  ------------------------------Weight|Gender Table------------------------------
33  P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
```

```
34        0.86235        0.13765        0.634394        0.365606
35
36
37     -------------------Height|Gender Table-------------------
38     P(Height=0|Gender=0) P(Height=1|Gender=0) P(Height=0|Gender=1) P(Height=1|Gender=1)
39         0.688248        0.311752        7.684886e-07        0.999999
40
41
42     Test Case #2
43     P(Gender=0) P(Weight=0|Gender=0) P(Weight=1|Gender=0) P(Height=0|Gender=0) P(Height=1|Gender=0) P(Height=0|Gender=1)
44         0.527978        0.816105        0.256124        0.931043        0.141905
45     total iterations: 5
46     -------------------Gender Table-------------------
47     P(Gender=0)  P(Gender=1)
48         0.726472    0.273528
49
50
51     -------------------Weight|Gender Table-------------------
52     P(Weight=0|Gender=0) P(Weight=1|Gender=0) P(Weight=0|Gender=1) P(Weight=1|Gender=1)
53         0.862348        0.137652        0.634407        0.365593
54
55
56     -------------------Height|Gender Table-------------------
57     P(Height=0|Gender=0) P(Height=1|Gender=0) P(Height=0|Gender=1) P(Height=1|Gender=1)
58         0.688258        0.311742        2.295971e-07        1.0
59
60
61     Test Case #3
62     P(Gender=0) P(Weight=0|Gender=0) P(Weight=1|Gender=0) P(Height=0|Gender=0) P(Height=1|Gender=0) P(Height=0|Gender=1)
63         0.1        0.1        0.1        0.1
64     total iterations: 6
65     -------------------Gender Table-------------------
66     P(Gender=0)  P(Gender=1)
```

```
67    0.726475    0.273525
68
69
70    ----------------------Weight|Gender Table----------------------
71    P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
72         0.862349              0.137651              0.634403              0.365597
73
74
75    ----------------------Height|Gender Table----------------------
76    P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
77         0.688255              0.311745              4.158310e-07              1.0
78
79
80    Test Case #4
81    P(Gender=0)  P(Weight=0|Gender=1)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
82        0.9              0.9              0.9              0.9
83    total iterations: 5
84    ----------------------Gender Table----------------------
85    P(Gender=0)  P(Gender=1)
86     0.726481    0.273519
87
88
89    ----------------------Weight|Gender Table----------------------
90    P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
91         0.86235               0.13765               0.634395              0.365605
92
93
94    ----------------------Height|Gender Table----------------------
95    P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
96         0.688249              0.311751              5.168287e-07              0.999999
97
98
99    Test Case #5
```

```
100  P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
101     0.5           0.5                  0.5                  0.5                   0.5
102  total iterations: 6
103  -------------Gender Table-------------
104  P(Gender=0)  P(Gender=1)
105  0.726476   0.273524
106
107
108  -------------Weight|Gender Table-------------
109  P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
110       0.862349             0.137651             0.634402             0.365598
111
112
113  -------------Height|Gender Table-------------
114  P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
115       0.688254             0.311746          2.123324e-07              1.0
116
117
118  *************************************************************
119  filename hw2dataset_30.txt
120  Provided
121  P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
122     0.7           0.8                  0.4                  0.7                   0.3
123  total iterations: 4
124  -------------Gender Table-------------
125  P(Gender=0)  P(Gender=1)
126  0.555546   0.444454
127
128
129  -------------Weight|Gender Table-------------
130  P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
131       0.892362             0.107638             0.234562             0.765438
132
```

```
133
134 ----------------------------------------------------Height|Gender Table----------------------------------------------
135  P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
136         0.532355              0.467645              0.234562              0.765438
137
138
139 Test Case #1
140  P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
141   0.383271          0.511622              0.027045              0.465921              0.96269
142 total iterations: 5
143 ----------------------------------------------------Gender Table----------------------------------------------------
144  P(Gender=0)  P(Gender=1)
145   0.555562     0.444438
146
147
148 ----------------------------------------------------Weight|Gender Table----------------------------------------------
149  P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
150         0.892329              0.107671              0.234578              0.765422
151
152
153 ----------------------------------------------------Height|Gender Table----------------------------------------------
154  P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
155         0.532334              0.467666              0.234578              0.765422
156
157
158 Test Case #2
159  P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
160   0.527978          0.816105              0.256124              0.931043              0.141905
161 total iterations: 4
162 ----------------------------------------------------Gender Table----------------------------------------------------
163  P(Gender=0)  P(Gender=1)
164   0.555383     0.444617
165
```

```
166
167
168 -----------------------------Weight|Gender Table-----------------------------
    P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
169      0.892667              0.107333              0.234423              0.765577
170
171
172 -----------------------------Height|Gender Table-----------------------------
    P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
173      0.532555              0.467445              0.234423              0.765577
174
175
176
177 Test Case #3
178 -----------------------------Gender Table-----------------------------
    P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
179    0.1            0.1                  0.1                  0.1
180 total iterations: 4
181
182 P(Gender=0)  P(Gender=1)
183  0.555503     0.444497
184
185
186 -----------------------------Weight|Gender Table-----------------------------
187 P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
188      0.892397              0.107603              0.234582              0.765418
189
190
191 -----------------------------Height|Gender Table-----------------------------
192 P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
193      0.532363              0.467637              0.234582              0.765418
194
195
196 Test Case #4
197 P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
198    0.9            0.9                  0.9                  0.9                  0.9
```

```
199  total iterations: 6
200  ---------------------------------------Gender Table---------------------------------------
201  P(Gender=0)  P(Gender=1)
202  0.555464   0.444536
203
204
205  ---------------------------Weight|Gender Table---------------------------
206  P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
207  0.892513            0.107487            0.234494            0.765506
208
209
210  ---------------------------Height|Gender Table---------------------------
211  P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
212  0.532454            0.467546            0.234494            0.765506
213
214
215  Test Case #5
216  P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
217  0.5       0.5               0.5               0.5               0.5
218  total iterations: 5
219  ---------------------------------------Gender Table---------------------------------------
220  P(Gender=0)  P(Gender=1)
221  0.555512   0.444488
222
223
224  ---------------------------Weight|Gender Table---------------------------
225  P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
226  0.892423            0.107577            0.234537            0.765463
227
228
229  ---------------------------Height|Gender Table---------------------------
230  P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
231  0.532394            0.467606            0.234537            0.765463
```

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232
233
234  ********************************************************************
235  filename hw2dataset_50.txt
236  Provided
237  P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
238     0.7           0.8                  0.4                   0.7                   0.3
239  total iterations: 30
240  ------------------------------Gender Table------------------------------
241  P(Gender=0)  P(Gender=1)
242  0.704226    0.295774
243
244
245  ------------------------------Weight|Gender Table------------------------------
246  P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
247        0.69528               0.30472               0.373143              0.626857
248
249
250  ------------------------------Height|Gender Table------------------------------
251  P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
252        0.851907              0.148093              0.000221              0.999779
253
254
255  Test Case #1
256  P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
257   0.383271           0.511622              0.027045              0.465921              0.96269
258  total iterations: 32
259  ------------------------------Gender Table------------------------------
260  P(Gender=0)  P(Gender=1)
261  0.704212    0.295788
262
263
264  ------------------------------Weight|Gender Table------------------------------
```

```
265
266    P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
             0.695288              0.304712              0.373139              0.626861
267
268
269    ----------------------------------Height|Gender Table----------------------------------
270    P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
271          0.851903              0.148097              0.000269              0.999731
272
273
274    Test Case #2
275    P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
276     0.527978         0.816105              0.256124              0.931043              0.141905
277    total iterations: 29
278    ----------------------------------Gender Table----------------------------------
279    P(Gender=0)  P(Gender=1)
280     0.704219    0.295781
281
282
283    ----------------------------------Weight|Gender Table----------------------------------
284    P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
285          0.695284              0.304716              0.373141              0.626859
286
287
288    ----------------------------------Height|Gender Table----------------------------------
289    P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
290          0.851905              0.148095              0.000243              0.999757
291
292
293    Test Case #3
294    P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
295       0.1             0.1                  0.1                  0.1                  0.1
296    total iterations: 35
297    ----------------------------------Gender Table----------------------------------
```

```
298
299    P(Gender=0)  P(Gender=1)
       0.704215    0.295785
300
301
302    ------------------------------------Weight|Gender Table------------------------------------
303    P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
304    0.695286              0.304714              0.37314               0.62686
305
306
307    ------------------------------------Height|Gender Table------------------------------------
308    P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
309    0.851904              0.148096              0.000259              0.999741
310
311
312    Test Case #4
313    P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
314    0.9          0.9                   0.9                   0.9                   0.9
315    total iterations: 27
316    ------------------------------------Gender Table------------------------------------
317    P(Gender=0)  P(Gender=1)
318    0.704222     0.295778
319
320
321    ------------------------------------Weight|Gender Table------------------------------------
322    P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
323    0.695282              0.304718              0.373142              0.626858
324
325
326    ------------------------------------Height|Gender Table------------------------------------
327    P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
328    0.851906              0.148094              0.000233              0.999767
329
330
```

```
331  Test Case #5
332  P(Gender=0) P(Weight=0|Gender=0) P(Weight=0|Gender=1) P(Height=0|Gender=0) P(Height=0|Gender=1)
333     0.5            0.5               0.5               0.5               0.5
334  total iterations: 33
335  ----------------------------------Gender Table----------------------------------
336  P(Gender=0) P(Gender=1)
337   0.704217   0.295783
338
339
340  ------------------------------Weight|Gender Table------------------------------
341  P(Weight=0|Gender=0) P(Weight=1|Gender=0) P(Weight=0|Gender=1) P(Weight=1|Gender=1)
342      0.695285            0.304715            0.373141            0.626859
343
344
345  ------------------------------Height|Gender Table------------------------------
346  P(Height=0|Gender=0) P(Height=1|Gender=0) P(Height=0|Gender=1) P(Height=1|Gender=1)
347      0.851905            0.148095            0.000249            0.999751
348
349
350  ***********************************************************************************
351  filename hw2dataset_70.txt
352  Provided
353  P(Gender=0) P(Weight=0|Gender=0) P(Weight=0|Gender=1) P(Height=0|Gender=0) P(Height=0|Gender=1)
354     0.7            0.8               0.4               0.7               0.3
355  total iterations: 65
356  ----------------------------------Gender Table----------------------------------
357  P(Gender=0) P(Gender=1)
358   0.573436   0.426564
359
360
361  ------------------------------Weight|Gender Table------------------------------
362  P(Weight=0|Gender=0) P(Weight=1|Gender=0) P(Weight=0|Gender=1) P(Weight=1|Gender=1)
363      0.502635            0.497365            0.027595            0.972405
```

```
364
365
366    -----------------Height|Gender Table-----------------
367    P(Height=0|Gender=0) P(Height=1|Gender=0) P(Height=0|Gender=1) P(Height=1|Gender=1)
368        0.546578           0.453422           0.202953           0.797047
369
370
371    Test Case #1
372    P(Gender=0) P(Weight=0|Gender=0) P(Weight=0|Gender=1) P(Height=0|Gender=0) P(Height=0|Gender=1)
373     0.383271       0.511622           0.027045           0.465921           0.96269
374    total iterations: 9
375    -----------------Gender Table-----------------
376    P(Gender=0) P(Gender=1)
377     0.576453   0.423547
378
379
380    -----------------Weight|Gender Table-----------------
381    P(Weight=0|Gender=0) P(Weight=1|Gender=0) P(Weight=0|Gender=1) P(Weight=1|Gender=1)
382        0.504306           0.495694           0.021937           0.978063
383
384
385    -----------------Height|Gender Table-----------------
386    P(Height=0|Gender=0) P(Height=1|Gender=0) P(Height=0|Gender=1) P(Height=1|Gender=1)
387        0.544071           0.455929           0.203918           0.796082
388
389
390    Test Case #2
391    P(Gender=0) P(Weight=0|Gender=0) P(Weight=0|Gender=1) P(Height=0|Gender=0) P(Height=0|Gender=1)
392     0.527978       0.816105           0.256124           0.931043           0.141905
393    total iterations: 80
394    -----------------Gender Table-----------------
395    P(Gender=0) P(Gender=1)
396     0.573502   0.426498
```

```
397
398
399   ---------------------------------Weight|Gender Table---------------------------------
400   P(Weight=0|Gender=0) P(Weight=1|Gender=0) P(Weight=0|Gender=1) P(Weight=1|Gender=1)
401        0.502683              0.497317             0.027457            0.972543
402
403
404   ---------------------------------Height|Gender Table---------------------------------
405   P(Height=0|Gender=0) P(Height=1|Gender=0) P(Height=0|Gender=1) P(Height=1|Gender=1)
406        0.546521              0.453479             0.202977            0.797023
407
408
409   Test Case #3
410   P(Gender=0) P(Weight=0|Gender=0) P(Weight=0|Gender=1) P(Height=0|Gender=0) P(Height=0|Gender=1)
411      0.1          0.1                0.1                 0.1                 0.1
412   total iterations: 82
413   ---------------------------------Gender Table---------------------------------
414   P(Gender=0) P(Gender=1)
415    0.573483    0.426517
416
417
418   ---------------------------------Weight|Gender Table---------------------------------
419   P(Weight=0|Gender=0) P(Weight=1|Gender=0) P(Weight=0|Gender=1) P(Weight=1|Gender=1)
420        0.502668              0.497332             0.027498            0.972502
421
422
423   ---------------------------------Height|Gender Table---------------------------------
424   P(Height=0|Gender=0) P(Height=1|Gender=0) P(Height=0|Gender=1) P(Height=1|Gender=1)
425        0.546538              0.453462             0.20297             0.79703
426
427
428   Test Case #4
429   P(Gender=0) P(Weight=0|Gender=0) P(Weight=0|Gender=1) P(Height=0|Gender=0) P(Height=0|Gender=1)
```

```
430    0.9    0.9    0.9    0.9    0.9    0.9
431  total iterations: 22
432  ---------------------Gender Table---------------------
433  P(Gender=0)  P(Gender=1)
434   0.573507    0.426493
435
436
437  ---------------------Weight|Gender Table---------------------
438  P(Weight=0|Gender=0) P(Weight=0|Gender=1) P(Weight=1|Gender=0) P(Weight=1|Gender=1)
439    0.502686            0.497314            0.027448            0.972552
440
441
442  ---------------------Height|Gender Table---------------------
443  P(Height=0|Gender=0) P(Height=0|Gender=1) P(Height=1|Gender=0) P(Height=1|Gender=1)
444    0.546517            0.453483            0.202978            0.797022
445
446
447  Test Case #5
448  P(Gender=0) P(Weight=0|Gender=0) P(Weight=0|Gender=1) P(Height=0|Gender=0) P(Height=0|Gender=1)
449    0.5          0.5                0.5                 0.5               0.5
450  total iterations: 75
451  ---------------------Gender Table---------------------
452  P(Gender=0)  P(Gender=1)
453   0.573511    0.426489
454
455
456  ---------------------Weight|Gender Table---------------------
457  P(Weight=0|Gender=0) P(Weight=0|Gender=1) P(Weight=1|Gender=0) P(Weight=1|Gender=1)
458    0.502689            0.497311            0.027439            0.972561
459
460
461  ---------------------Height|Gender Table---------------------
462  P(Height=0|Gender=0) P(Height=0|Gender=1) P(Height=1|Gender=0) P(Height=1|Gender=1)
```

```
463        0.546513          0.453487            0.20298            0.79702
464
465
466     ************************************************************************************
467     filename hw2dataset_100.txt
468     Provided
469     P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
470        0.7              0.8                  0.7                  0.4                  0.3
471     total iterations: 8
472     ----------------------------------Gender Table----------------------------------
473     P(Gender=0)  P(Gender=1)
474     0.720806     0.279194
475
476
477     --------------------------------Weight|Gender Table--------------------------------
478     P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
479        0.831221              0.168779              0.361221              0.638779
480
481
482     --------------------------------Height|Gender Table--------------------------------
483     P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
484        0.7813                0.2187                0.311017              0.688983
485
486
487     Test Case #1
488     P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
489        0.383271             0.511622              0.027045              0.465921              0.96269
490     total iterations: 19
491     ----------------------------------Gender Table----------------------------------
492     P(Gender=0)  P(Gender=1)
493     0.76765      0.23235
494
495
```

```
496   --------------------------------Weight|Gender Table---------------------
497   P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
498       0.823673            0.176327             0.291403             0.708597
499
500
501   --------------------------------Height|Gender Table---------------------
502   P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
503       0.75895             0.24105              0.290044             0.709956
504
505
506   Test Case #2
507   P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
508    0.527978       0.816105             0.256124             0.931043             0.141905
509   total iterations: 7
510   -----------------------------Gender Table----------------------
511   P(Gender=0)  P(Gender=1)
512    0.62245     0.37755
513
514
515   --------------------------------Weight|Gender Table---------------------
516   P(Weight=0|Gender=0)  P(Weight=1|Gender=0)  P(Weight=0|Gender=1)  P(Weight=1|Gender=1)
517       0.80374             0.19626              0.528968             0.471032
518
519
520   --------------------------------Height|Gender Table---------------------
521   P(Height=0|Gender=0)  P(Height=1|Gender=0)  P(Height=0|Gender=1)  P(Height=1|Gender=1)
522       0.914255            0.085745             0.214335             0.785665
523
524
525   Test Case #3
526   P(Gender=0)  P(Weight=0|Gender=0)  P(Weight=0|Gender=1)  P(Height=0|Gender=0)  P(Height=0|Gender=1)
527     0.1            0.1                  0.1                  0.1                  0.1
528   total iterations: 2
```

```
529   ----------------------------------------Gender Table----------------------------------------
530   P(Gender=0)  P(Gender=1)
531     0.1         0.9
532
533
534   --------------------------------------Weight|Gender Table--------------------------------------
535   P(Weight=0|Gender=0) P(Weight=1|Gender=0) P(Weight=0|Gender=1) P(Weight=1|Gender=1)
536          0.7                 0.3
537
538
539   --------------------------------------Height|Gender Table--------------------------------------
540   P(Height=0|Gender=0) P(Height=1|Gender=0) P(Height=0|Gender=1) P(Height=1|Gender=1)
541          0.65                0.35
542
543
544   Test Case #4
545   P(Gender=0) P(Weight=0|Gender=0) P(Weight=0|Gender=1) P(Height=0|Gender=0) P(Height=0|Gender=1)
546     0.9           0.9                 0.9                  0.9
547   total iterations: 2
548   ----------------------------------------Gender Table----------------------------------------
549   P(Gender=0)  P(Gender=1)
550     0.9         0.1
551
552
553   --------------------------------------Weight|Gender Table--------------------------------------
554   P(Weight=0|Gender=0) P(Weight=1|Gender=0) P(Weight=0|Gender=1) P(Weight=1|Gender=1)
555          0.7                 0.3
556
557
558   --------------------------------------Height|Gender Table--------------------------------------
559   P(Height=0|Gender=0) P(Height=1|Gender=0) P(Height=0|Gender=1) P(Height=1|Gender=1)
560          0.65                0.35
561
```

562
563 Test Case #5
564 P(Gender=0) P(Weight=0|Gender=0) P(Weight=0|Gender=1) P(Height=0|Gender=0) P(Height=0|Gender=1)
565   0.5   0.5   0.5   0.5   0.5
566 total iterations: 2
567 ------------------Gender Table------------------
568 P(Gender=0) P(Gender=1)
569   0.5   0.5
570
571
572 ------------------Weight|Gender Table------------------
573 P(Weight=0|Gender=0) P(Weight=1|Gender=0) P(Weight=0|Gender=1) P(Weight=1|Gender=1)
574   0.7   0.3   0.7   0.3
575
576
577 ------------------Height|Gender Table------------------
578 P(Height=0|Gender=0) P(Height=1|Gender=0) P(Height=0|Gender=1) P(Height=1|Gender=1)
579   0.65   0.35   0.65   0.35
580
581
582
583 Process finished with exit code 0
584