File - unknown 1 D:\Python27\python.exe E:/Projects/360Poject/ HTTPData/Co-Training/Co-Training/Run.py 2 Predict Data Generation Done... 3 Co-Training Starting... 4 The 1th Iteration... 5 Co-TrainingMethods dataset initalization... 6 Random stage... 7 Random stage... 8 label data consist done, positive num is 8074, negative num is 2427... 9 Train data first consistant, Test data first consistant... 10 RandomForest TrainingMethods... 11 The accurance is 0.768865 12 TotalRight: 3230, TP:135, FP:135, FN:836 13 The precision is 0.500000 14 The recall is 0.139032 15 GradientBoosting TrainingMethods... 16 The accurance is 0.732207 17 TotalRight: 3076, TP: 222, FP: 376, FN: 749 18 The precision is 0.371237 19 The recall is 0.228630 20 Training set addition done... 21 Predict set removement done... 22 The Co-Training Validation Result... 23 The accurance is 0.74244224 TotalRight: 3119, TP:199, FP:310, FN:772 25 The precision is 0.390963 26 The recall is 0.204943 27 The 2th Iteration... 28 Trainset and Testset is existing, loading data from local file... 29 RandomForest TrainingMethods... 30 The accurance is 0.75743931 TotalRight: 3182, TP:194, FP:242, FN:777 32 The precision is 0.444954 33 The recall is 0.199794 34 GradientBoosting TrainingMethods... 35 The accurance is 0.723875 36 TotalRight: 3041, TP: 223, FP: 412, FN: 748 37 The precision is 0.351181 38 The recall is 0.229660 39 Training set addition done...

40 Predict set removement done...

```
41 The Co-Training Validation Result...
42 The accurance is 0.731254
43 TotalRight: 3072, TP: 207, FP: 365, FN: 764
44 The precision is 0.361888
45 The recall is 0.213182
46 The 3th Iteration...
47 Trainset and Testset is existing, loading data
  from local file...
48 RandomForest TrainingMethods...
49 The accurance is 0.751964
50 TotalRight: 3159, TP: 203, FP: 274, FN: 768
51 The precision is 0.425577
52 The recall is 0.209063
53 GradientBoosting TrainingMethods...
54 The accurance is 0.712449
55 TotalRight: 2993, TP: 224, FP: 461, FN: 747
56 The precision is 0.327007
57 The recall is 0.230690
58 Training set addition done...
59 Predict set removement done...
60 The Co-Training Validation Result...
61 The accurance is 0.721971
62 TotalRight: 3033, TP: 218, FP: 415, FN: 753
63 The precision is 0.344392
64 The recall is 0.224511
65 The 4th Iteration...
66 Trainset and Testset is existing, loading data
  from local file...
67 RandomForest TrainingMethods...
68 The accurance is 0.740538
69 TotalRight:3111, TP:232, FP:351, FN:739
70 The precision is 0.397942
71 The recall is 0.238929
72 GradientBoosting TrainingMethods...
73 The accurance is 0.709117
74 TotalRight:2979, TP:226, FP:477, FN:745
75 The precision is 0.321479
76 The recall is 0.232750
77 Training set addition done...
78 Predict set removement done...
79 The Co-Training Validation Result...
80 The accurance is 0.721019
81 TotalRight: 3029, TP: 228, FP: 429, FN: 743
82 The precision is 0.347032
```

```
83 The recall is 0.234809
 84 The 5th Iteration...
 85 Trainset and Testset is existing, loading data
    from local file...
 86 RandomForest TrainingMethods...
 87 The accurance is 0.734825
 88 TotalRight:3087, TP:256, FP:399, FN:715
 89 The precision is 0.390840
 90 The recall is 0.263646
 91 GradientBoosting TrainingMethods...
 92 The accurance is 0.701024
 93 TotalRight:2945, TP:247, FP:532, FN:724
 94 The precision is 0.317073
 95 The recall is 0.254377
 96 Training set addition done...
 97 Predict set removement done...
 98 The Co-Training Validation Result...
 99 The accurance is 0.704832
100 TotalRight:2961, TP:236, FP:505, FN:735
101 The precision is 0.318489
102 The recall is 0.243048
103 The 6th Iteration...
104 Trainset and Testset is existing, loading data
    from local file...
105 RandomForest TrainingMethods...
106 The accurance is 0.728636
107 TotalRight: 3061, TP:251, FP:420, FN:720
108 The precision is 0.374069
109 The recall is 0.258496
110 GradientBoosting TrainingMethods...
111 D:\Python27\lib\site-packages\sklearn\ensemble\
    gradient boosting.py:516: RuntimeWarning:
    overflow encountered in double scalars
      tree.value[leaf, 0, 0] = numerator /
112
    denominator
113 D:\Python27\lib\site-packages\sklearn\ensemble\
    gradient boosting.py:489: RuntimeWarning:
    invalid value encountered in multiply
     np.sum(sample weight * ((y * pred) - np.
114
    logaddexp(0.0, pred))))
115 D:\Python27\lib\site-packages\sklearn\ensemble\
    gradient boosting.py:489: RuntimeWarning:
    invalid value encountered in subtract
116
     np.sum(sample weight * ((y * pred) - np.
```

```
116 logaddexp(0.0, pred))))
117 The accurance is 0.701262
118 TotalRight: 2946, TP: 237, FP: 521, FN: 734
119 The precision is 0.312665
120 The recall is 0.244078
121 Training set addition done...
122 Predict set removement done...
123 The Co-Training Validation Result...
124 The accurance is 0.710307
125 TotalRight: 2984, TP: 239, FP: 485, FN: 732
126 The precision is 0.330110
127 The recall is 0.246138
128 The 7th Iteration...
129 Trainset and Testset is existing, loading data
    from local file...
130 RandomForest TrainingMethods...
131 The accurance is 0.727208
132 TotalRight:3055, TP:265, FP:440, FN:706
133 The precision is 0.375887
134 The recall is 0.272915
135 GradientBoosting TrainingMethods...
136 The accurance is 0.697929
137 TotalRight:2932, TP:269, FP:567, FN:702
138 The precision is 0.321770
139 The recall is 0.277034
140 Training set addition done...
141 Predict set removement done...
142 The Co-Training Validation Result...
143 The accurance is 0.710783
144 TotalRight: 2986, TP: 270, FP: 514, FN: 701
145 The precision is 0.344388
146 The recall is 0.278064
147 The 8th Iteration...
148 Trainset and Testset is existing, loading data
    from local file...
149 RandomForest TrainingMethods...
150 The accurance is 0.718400
151 TotalRight:3018, TP:282, FP:494, FN:689
152 The precision is 0.363402
153 The recall is 0.290422
154 GradientBoosting TrainingMethods...
155 The accurance is 0.695549
156 TotalRight: 2922, TP: 259, FP: 567, FN: 712
157 The precision is 0.313559
```

158 The recall is 0.266735 159 Training set addition done... 160 Predict set removement done... 161 The Co-Training Validation Result... 162 The accurance is 0.701738 163 TotalRight: 2948, TP: 257, FP: 539, FN: 714 164 The precision is 0.322864 165 The recall is 0.264676 166 The 9th Iteration... 167 Trainset and Testset is existing, loading data from local file... 168 RandomForest TrainingMethods... 169 The accurance is 0.712687 170 TotalRight:2994, TP:295, FP:531, FN:676 171 The precision is 0.357143 172 The recall is 0.303811 173 GradientBoosting TrainingMethods... 174 The accurance is 0.691264 175 TotalRight:2904, TP:280, FP:606, FN:691 176 The precision is 0.316027 177 The recall is 0.288363 178 Training set addition done... 179 Predict set removement done... 180 The Co-Training Validation Result... 181 The accurance is 0.698643 182 TotalRight:2935, TP:275, FP:570, FN:696 183 The precision is 0.325444184 The recall is 0.283213 185 The 10th Iteration... 186 Trainset and Testset is existing, loading data from local file... 187 RandomForest TrainingMethods... 188 The accurance is 0.700786 189 TotalRight: 2944, TP: 323, FP: 609, FN: 648 190 The precision is 0.346567 191 The recall is 0.332647 192 GradientBoosting TrainingMethods... 193 The accurance is 0.679838 194 TotalRight: 2856, TP: 266, FP: 640, FN: 705 195 The precision is 0.293598 196 The recall is 0.273944 197 Training set addition done... 198 Predict set removement done... 199 The Co-Training Validation Result...

```
200 The accurance is 0.688646
201 TotalRight: 2893, TP: 268, FP: 605, FN: 703
202 The precision is 0.306987
203 The recall is 0.276004
204 The 11th Iteration...
205 Trainset and Testset is existing, loading data
    from local file...
206 RandomForest TrainingMethods...
207 The accurance is 0.706022
208 TotalRight: 2966, TP: 333, FP: 597, FN: 638
209 The precision is 0.358065
210 The recall is 0.342945
211 GradientBoosting TrainingMethods...
212 The accurance is 0.682933
213 TotalRight: 2869, TP: 292, FP: 653, FN: 679
214 The precision is 0.308995
215 The recall is 0.300721
216 Training set addition done...
217 Predict set removement done...
218 The Co-Training Validation Result...
219 The accurance is 0.696025
220 TotalRight:2924, TP:292, FP:598, FN:679
221 The precision is 0.328090
222 The recall is 0.300721
223 The 12th Iteration...
224 Trainset and Testset is existing, loading data
    from local file...
225 RandomForest TrainingMethods...
226 The accurance is 0.701738
227 TotalRight: 2948, TP: 325, FP: 607, FN: 646
228 The precision is 0.348712
229 The recall is 0.334706
230 GradientBoosting TrainingMethods...
231 The accurance is 0.686027
232 TotalRight: 2882, TP: 287, FP: 635, FN: 684
233 The precision is 0.311280
234 The recall is 0.295572
235 Training set addition done...
236 Predict set removement done...
237 The Co-Training Validation Result...
238 The accurance is 0.692454
239 TotalRight: 2909, TP: 289, FP: 610, FN: 682
240 The precision is 0.321468
241 The recall is 0.297631
```

242 The 13th Iteration... 243 Trainset and Testset is existing, loading data from local file... 244 RandomForest TrainingMethods... 245 The accurance is 0.706975 246 TotalRight: 2970, TP: 321, FP: 581, FN: 650 247 The precision is 0.355876 248 The recall is 0.330587 249 GradientBoosting TrainingMethods... 250 The accurance is 0.684123 251 TotalRight: 2874, TP: 293, FP: 649, FN: 678 252 The precision is 0.311040 253 The recall is 0.301751 254 Training set addition done... 255 Predict set removement done... 256 The Co-Training Validation Result... 257 The accurance is 0.695073 258 TotalRight:2920, TP:289, FP:599, FN:682 259 The precision is 0.325450 260 The recall is 0.297631 261 The 14th Iteration... 262 Trainset and Testset is existing, loading data from local file... 263 RandomForest TrainingMethods... 264 The accurance is 0.710069 265 TotalRight: 2983, TP: 330, FP: 577, FN: 641 266 The precision is 0.363837 267 The recall is 0.339856 268 GradientBoosting TrainingMethods... 269 The accurance is 0.677696 270 TotalRight: 2847, TP: 289, FP: 672, FN: 682 271 The precision is 0.300728 272 The recall is 0.297631 273 Training set addition done... 274 Predict set removement done... 275 The Co-Training Validation Result... 276 The accurance is 0.686741 277 TotalRight: 2885, TP: 290, FP: 635, FN: 681 278 The precision is 0.313514 279 The recall is 0.298661 280 The 15th Iteration... 281 Trainset and Testset is existing, loading data from local file... 282 RandomForest TrainingMethods...

```
File - unknown
283 The accurance is 0.719829
284 TotalRight: 3024, TP: 309, FP: 515, FN: 662
285 The precision is 0.375000
286 The recall is 0.318229
287 GradientBoosting TrainingMethods...
288 The accurance is 0.675315
289 TotalRight: 2837, TP: 292, FP: 685, FN: 679
290 The precision is 0.298874
291 The recall is 0.300721
292 Training set addition done...
293 Predict set removement done...
294 The Co-Training Validation Result...
295 The accurance is 0.686265
296 TotalRight: 2883, TP: 293, FP: 640, FN: 678
297 The precision is 0.314041
298 The recall is 0.301751
299 Iteration times are out of threshold(15), Co-
    Training Stop...
300 [135, 194, 203, 232, 256, 251, 265, 282, 295,
    323, 333, 325, 321, 330, 309]
301 [222, 223, 224, 226, 247, 237, 269, 259, 280,
    266, 292, 287, 293, 289, 292]
302 [199, 207, 218, 228, 236, 239, 270, 257, 275,
    268, 292, 289, 289, 290, 293]
303
304 Process finished with exit code 0
305
```