

-----DYNAMIC WITH NO WEIGHT , DISCARD 5% freq, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 64.0  
TN: 510.0  
FN: 0.0  
TPR: NaN  
FPR: 0.11149825783972125  
TNR: 0.8885017421602788  
FNR: NaN

DICTIONARY SIZE: 109

TP: 0.0  
FP: 33.0  
TN: 551.0  
FN: 0.0  
TPR: NaN  
FPR: 0.05650684931506849  
TNR: 0.9434931506849316  
FNR: NaN

DICTIONARY SIZE: 126

TP: 0.0  
FP: 19.0  
TN: 529.0  
FN: 0.0  
TPR: NaN  
FPR: 0.03467153284671533  
TNR: 0.9653284671532847  
FNR: NaN

DICTIONARY SIZE: 136

TP: 39.0  
FP: 7.0  
TN: 580.0  
FN: 1.0  
TPR: 0.975  
FPR: 0.01192504258943782  
TNR: 0.9880749574105622  
FNR: 0.025

DICTIONARY SIZE: 189

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 192

TP: 0.0  
FP: 4.0  
TN: 579.0  
FN: 0.0  
TPR: NaN  
FPR: 0.00686106346483705  
TNR: 0.9931389365351629  
FNR: NaN

DICTIONARY SIZE: 190

TP: 40.0  
FP: 42.0  
TN: 543.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.07179487179487179  
TNR: 0.9282051282051282  
FNR: 0.0

DICTIONARY SIZE: 242

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 257

TP: 38.0  
FP: 16.0  
TN: 554.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.028070175438596492  
TNR: 0.9719298245614035  
FNR: 0.05

-----DYNAMIC WITH 0.9 WEIGHT , DISCARD 5% freq, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 64.0  
TN: 510.0  
FN: 0.0  
TPR: NaN  
FPR: 0.11149825783972125  
TNR: 0.8885017421602788  
FNR: NaN

DICTIONARY SIZE: 105

TP: 0.0  
FP: 32.0  
TN: 552.0

FN: 0.0  
TPR: NaN  
FPR: 0.0547945205479452  
TNR: 0.9452054794520548  
FNR: NaN

DICTIONARY SIZE: 114

TP: 0.0  
FP: 21.0  
TN: 527.0  
FN: 0.0  
TPR: NaN  
FPR: 0.03832116788321168  
TNR: 0.9616788321167883  
FNR: NaN

DICTIONARY SIZE: 128

TP: 39.0  
FP: 7.0  
TN: 580.0  
FN: 1.0  
TPR: 0.975  
FPR: 0.01192504258943782  
TNR: 0.9880749574105622  
FNR: 0.025

DICTIONARY SIZE: 173

TP: 0.0  
FP: 2.0  
TN: 538.0  
FN: 0.0  
TPR: NaN  
FPR: 0.003703703703703704  
TNR: 0.9962962962962963  
FNR: NaN

DICTIONARY SIZE: 169

TP: 0.0  
FP: 6.0  
TN: 577.0  
FN: 0.0  
TPR: NaN  
FPR: 0.010291595197255575  
TNR: 0.9897084048027445  
FNR: NaN

DICTIONARY SIZE: 188

TP: 40.0  
FP: 48.0  
TN: 537.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.08205128205128205  
TNR: 0.9179487179487179

FNR: 0.0

DICTIONARY SIZE: 241

TP: 0.0  
FP: 2.0  
TN: 538.0  
FN: 0.0  
TPR: NaN  
FPR: 0.003703703703703704  
TNR: 0.9962962962962963  
FNR: NaN

DICTIONARY SIZE: 244

TP: 38.0  
FP: 24.0  
TN: 546.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.042105263157894736  
TNR: 0.9578947368421052  
FNR: 0.05

-----DYNAMIC WITH 0.8 WEIGHT , DISCARD 5% freq, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 64.0  
TN: 510.0  
FN: 0.0  
TPR: NaN  
FPR: 0.11149825783972125  
TNR: 0.8885017421602788  
FNR: NaN

DICTIONARY SIZE: 105

TP: 0.0  
FP: 32.0  
TN: 552.0  
FN: 0.0  
TPR: NaN  
FPR: 0.0547945205479452  
TNR: 0.9452054794520548  
FNR: NaN

DICTIONARY SIZE: 114

TP: 0.0  
FP: 21.0  
TN: 527.0  
FN: 0.0  
TPR: NaN  
FPR: 0.03832116788321168  
TNR: 0.9616788321167883  
FNR: NaN

DICTIONARY SIZE: 128

TP: 39.0  
FP: 7.0  
TN: 580.0  
FN: 1.0  
TPR: 0.975  
FPR: 0.01192504258943782  
TNR: 0.9880749574105622  
FNR: 0.025

DICTIONARY SIZE: 174

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 169

TP: 0.0  
FP: 5.0  
TN: 578.0  
FN: 0.0  
TPR: NaN  
FPR: 0.008576329331046312  
TNR: 0.9914236706689536  
FNR: NaN

DICTIONARY SIZE: 183

TP: 40.0  
FP: 53.0  
TN: 532.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.0905982905982906  
TNR: 0.9094017094017094  
FNR: 0.0

DICTIONARY SIZE: 249

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 237

TP: 38.0  
FP: 12.0

TN: 558.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.021052631578947368  
TNR: 0.9789473684210527  
FNR: 0.05

-----DYNAMIC WITH 0.7 WEIGHT , DISCARD 5% freq, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 64.0  
TN: 510.0  
FN: 0.0  
TPR: NaN  
FPR: 0.11149825783972125  
TNR: 0.8885017421602788  
FNR: NaN

DICTIONARY SIZE: 99

TP: 0.0  
FP: 33.0  
TN: 551.0  
FN: 0.0  
TPR: NaN  
FPR: 0.05650684931506849  
TNR: 0.9434931506849316  
FNR: NaN

DICTIONARY SIZE: 118

TP: 0.0  
FP: 20.0  
TN: 528.0  
FN: 0.0  
TPR: NaN  
FPR: 0.0364963503649635  
TNR: 0.9635036496350365  
FNR: NaN

DICTIONARY SIZE: 126

TP: 39.0  
FP: 7.0  
TN: 580.0  
FN: 1.0  
TPR: 0.975  
FPR: 0.01192504258943782  
TNR: 0.9880749574105622  
FNR: 0.025

DICTIONARY SIZE: 170

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN

FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 178

TP: 0.0  
FP: 4.0  
TN: 579.0  
FN: 0.0  
TPR: NaN  
FPR: 0.00686106346483705  
TNR: 0.9931389365351629  
FNR: NaN

DICTIONARY SIZE: 196

TP: 40.0  
FP: 46.0  
TN: 539.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.07863247863247863  
TNR: 0.9213675213675213  
FNR: 0.0

DICTIONARY SIZE: 242

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 235

TP: 38.0  
FP: 18.0  
TN: 552.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.031578947368421054  
TNR: 0.968421052631579  
FNR: 0.05

-----DYNAMIC WITH 0.6 WEIGHT , DISCARD 5% freq, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 64.0  
TN: 510.0  
FN: 0.0  
TPR: NaN  
FPR: 0.11149825783972125  
TNR: 0.8885017421602788  
FNR: NaN

DICTIONARY SIZE: 102

TP: 0.0  
FP: 33.0  
TN: 551.0  
FN: 0.0  
TPR: NaN  
FPR: 0.05650684931506849  
TNR: 0.9434931506849316  
FNR: NaN

DICTIONARY SIZE: 125

TP: 0.0  
FP: 20.0  
TN: 528.0  
FN: 0.0  
TPR: NaN  
FPR: 0.0364963503649635  
TNR: 0.9635036496350365  
FNR: NaN

DICTIONARY SIZE: 137

TP: 39.0  
FP: 8.0  
TN: 579.0  
FN: 1.0  
TPR: 0.975  
FPR: 0.013628620102214651  
TNR: 0.9863713798977853  
FNR: 0.025

DICTIONARY SIZE: 180

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 182

TP: 0.0  
FP: 5.0  
TN: 578.0  
FN: 0.0  
TPR: NaN  
FPR: 0.008576329331046312  
TNR: 0.9914236706689536  
FNR: NaN

DICTIONARY SIZE: 179



TP: 40.0  
FP: 44.0  
TN: 541.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.07521367521367521  
TNR: 0.9247863247863248  
FNR: 0.0

DICTIONARY SIZE: 240

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 246

TP: 38.0  
FP: 17.0  
TN: 553.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.02982456140350877  
TNR: 0.9701754385964912  
FNR: 0.05

-----DYNAMIC WITH 0.5 WEIGHT , DISCARD 5% freq, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 64.0  
TN: 510.0  
FN: 0.0  
TPR: NaN  
FPR: 0.11149825783972125  
TNR: 0.8885017421602788  
FNR: NaN

DICTIONARY SIZE: 103

TP: 0.0  
FP: 33.0  
TN: 551.0  
FN: 0.0  
TPR: NaN  
FPR: 0.05650684931506849  
TNR: 0.9434931506849316  
FNR: NaN

DICTIONARY SIZE: 125

TP: 0.0  
FP: 21.0  
TN: 527.0

FN: 0.0  
TPR: NaN  
FPR: 0.03832116788321168  
TNR: 0.9616788321167883  
FNR: NaN

DICTIONARY SIZE: 136

TP: 39.0  
FP: 11.0  
TN: 576.0  
FN: 1.0  
TPR: 0.975  
FPR: 0.018739352640545145  
TNR: 0.9812606473594548  
FNR: 0.025

DICTIONARY SIZE: 186

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 177

TP: 0.0  
FP: 6.0  
TN: 577.0  
FN: 0.0  
TPR: NaN  
FPR: 0.010291595197255575  
TNR: 0.9897084048027445  
FNR: NaN

DICTIONARY SIZE: 177

TP: 40.0  
FP: 41.0  
TN: 544.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.07008547008547009  
TNR: 0.9299145299145299  
FNR: 0.0

DICTIONARY SIZE: 243

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481

FNR: NaN

DICTIONARY SIZE: 246

TP: 39.0  
FP: 26.0  
TN: 544.0  
FN: 1.0  
TPR: 0.975  
FPR: 0.0456140350877193  
TNR: 0.9543859649122807  
FNR: 0.025

-----DYNAMIC WITH 0.4 WEIGHT , DISCARD 5% freq, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 64.0  
TN: 510.0  
FN: 0.0  
TPR: NaN  
FPR: 0.11149825783972125  
TNR: 0.8885017421602788  
FNR: NaN

DICTIONARY SIZE: 104

TP: 0.0  
FP: 33.0  
TN: 551.0  
FN: 0.0  
TPR: NaN  
FPR: 0.05650684931506849  
TNR: 0.9434931506849316  
FNR: NaN

DICTIONARY SIZE: 130

TP: 0.0  
FP: 19.0  
TN: 529.0  
FN: 0.0  
TPR: NaN  
FPR: 0.03467153284671533  
TNR: 0.9653284671532847  
FNR: NaN

DICTIONARY SIZE: 140

TP: 38.0  
FP: 8.0  
TN: 579.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.013628620102214651  
TNR: 0.9863713798977853  
FNR: 0.05

DICTIONARY SIZE: 189

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 186

TP: 0.0  
FP: 4.0  
TN: 579.0  
FN: 0.0  
TPR: NaN  
FPR: 0.00686106346483705  
TNR: 0.9931389365351629  
FNR: NaN

DICTIONARY SIZE: 186

TP: 40.0  
FP: 43.0  
TN: 542.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.0735042735042735  
TNR: 0.9264957264957265  
FNR: 0.0

DICTIONARY SIZE: 249

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 242

TP: 37.0  
FP: 13.0  
TN: 557.0  
FN: 3.0  
TPR: 0.925  
FPR: 0.02280701754385965  
TNR: 0.9771929824561404  
FNR: 0.075

-----DYNAMIC WITH 0.3 WEIGHT , DISCARD 5% freq, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 64.0  
TN: 510.0  
FN: 0.0  
TPR: NaN  
FPR: 0.11149825783972125  
TNR: 0.8885017421602788  
FNR: NaN

DICTIONARY SIZE: 103

TP: 0.0  
FP: 35.0  
TN: 549.0  
FN: 0.0  
TPR: NaN  
FPR: 0.059931506849315065  
TNR: 0.940068493150685  
FNR: NaN

DICTIONARY SIZE: 118

TP: 0.0  
FP: 23.0  
TN: 525.0  
FN: 0.0  
TPR: NaN  
FPR: 0.041970802919708027  
TNR: 0.958029197080292  
FNR: NaN

DICTIONARY SIZE: 131

TP: 38.0  
FP: 8.0  
TN: 579.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.013628620102214651  
TNR: 0.9863713798977853  
FNR: 0.05

DICTIONARY SIZE: 186

TP: 0.0  
FP: 2.0  
TN: 538.0  
FN: 0.0  
TPR: NaN  
FPR: 0.003703703703703704  
TNR: 0.9962962962962963  
FNR: NaN

DICTIONARY SIZE: 179

TP: 0.0  
FP: 4.0  
TN: 579.0  
FN: 0.0

TPR: NaN  
FPR: 0.00686106346483705  
TNR: 0.9931389365351629  
FNR: NaN

DICTIONARY SIZE: 189

TP: 40.0  
FP: 44.0  
TN: 541.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.07521367521367521  
TNR: 0.9247863247863248  
FNR: 0.0

DICTIONARY SIZE: 239

TP: 0.0  
FP: 4.0  
TN: 536.0  
FN: 0.0  
TPR: NaN  
FPR: 0.007407407407407408  
TNR: 0.9925925925925926  
FNR: NaN

DICTIONARY SIZE: 240

TP: 37.0  
FP: 17.0  
TN: 553.0  
FN: 3.0  
TPR: 0.925  
FPR: 0.02982456140350877  
TNR: 0.9701754385964912  
FNR: 0.075

-----DYNAMIC WITH 0.2 WEIGHT , DISCARD 5% freq, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 64.0  
TN: 510.0  
FN: 0.0  
TPR: NaN  
FPR: 0.11149825783972125  
TNR: 0.8885017421602788  
FNR: NaN

DICTIONARY SIZE: 103

TP: 0.0  
FP: 35.0  
TN: 549.0  
FN: 0.0  
TPR: NaN  
FPR: 0.059931506849315065  
TNR: 0.940068493150685

FNR: NaN

DICTIONARY SIZE: 119

TP: 0.0  
FP: 23.0  
TN: 525.0  
FN: 0.0  
TPR: NaN  
FPR: 0.041970802919708027  
TNR: 0.958029197080292  
FNR: NaN

DICTIONARY SIZE: 125

TP: 38.0  
FP: 8.0  
TN: 579.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.013628620102214651  
TNR: 0.9863713798977853  
FNR: 0.05

DICTIONARY SIZE: 180

TP: 0.0  
FP: 2.0  
TN: 537.0  
FN: 0.0  
TPR: NaN  
FPR: 0.0037105751391465678  
TNR: 0.9962894248608535  
FNR: NaN

DICTIONARY SIZE: 181

TP: 0.0  
FP: 4.0  
TN: 579.0  
FN: 0.0  
TPR: NaN  
FPR: 0.00686106346483705  
TNR: 0.9931389365351629  
FNR: NaN

DICTIONARY SIZE: 184

TP: 40.0  
FP: 42.0  
TN: 543.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.07179487179487179  
TNR: 0.9282051282051282  
FNR: 0.0

DICTIONARY SIZE: 225

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 230

TP: 38.0  
FP: 11.0  
TN: 559.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.01929824561403509  
TNR: 0.980701754385965  
FNR: 0.05

-----DYNAMIC WITH 0.1 WEIGHT , DISCARD 5% freq, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 64.0  
TN: 510.0  
FN: 0.0  
TPR: NaN  
FPR: 0.11149825783972125  
TNR: 0.8885017421602788  
FNR: NaN

DICTIONARY SIZE: 103

TP: 0.0  
FP: 35.0  
TN: 549.0  
FN: 0.0  
TPR: NaN  
FPR: 0.059931506849315065  
TNR: 0.940068493150685  
FNR: NaN

DICTIONARY SIZE: 118

TP: 0.0  
FP: 23.0  
TN: 525.0  
FN: 0.0  
TPR: NaN  
FPR: 0.041970802919708027  
TNR: 0.958029197080292  
FNR: NaN

DICTIONARY SIZE: 132

TP: 39.0  
FP: 7.0



TN: 580.0  
FN: 1.0  
TPR: 0.975  
FPR: 0.01192504258943782  
TNR: 0.9880749574105622  
FNR: 0.025

DICTIONARY SIZE: 172

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 174

TP: 0.0  
FP: 4.0  
TN: 579.0  
FN: 0.0  
TPR: NaN  
FPR: 0.00686106346483705  
TNR: 0.9931389365351629  
FNR: NaN

DICTIONARY SIZE: 181

TP: 40.0  
FP: 38.0  
TN: 547.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.06495726495726496  
TNR: 0.935042735042735  
FNR: 0.0

DICTIONARY SIZE: 227

TP: 0.0  
FP: 3.0  
TN: 537.0  
FN: 0.0  
TPR: NaN  
FPR: 0.005555555555555556  
TNR: 0.9944444444444445  
FNR: NaN

DICTIONARY SIZE: 227

TP: 38.0  
FP: 12.0  
TN: 558.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.021052631578947368

TNR: 0.9789473684210527  
FNR: 0.05

-----DYNAMIC WITH NO WEIGHT , DISCARD 5% length, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 61.0  
TN: 513.0  
FN: 0.0  
TPR: NaN  
FPR: 0.10627177700348432  
TNR: 0.8937282229965157  
FNR: NaN

DICTIONARY SIZE: 105

TP: 0.0  
FP: 33.0  
TN: 551.0  
FN: 0.0  
TPR: NaN  
FPR: 0.05650684931506849  
TNR: 0.9434931506849316  
FNR: NaN

DICTIONARY SIZE: 134

TP: 0.0  
FP: 20.0  
TN: 528.0  
FN: 0.0  
TPR: NaN  
FPR: 0.0364963503649635  
TNR: 0.9635036496350365  
FNR: NaN

DICTIONARY SIZE: 141

TP: 38.0  
FP: 7.0  
TN: 580.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.01192504258943782  
TNR: 0.9880749574105622  
FNR: 0.05

DICTIONARY SIZE: 195

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 194

TP: 0.0  
FP: 5.0  
TN: 578.0  
FN: 0.0  
TPR: NaN  
FPR: 0.008576329331046312  
TNR: 0.9914236706689536  
FNR: NaN

DICTIONARY SIZE: 200

TP: 40.0  
FP: 39.0  
TN: 546.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.06666666666666667  
TNR: 0.9333333333333333  
FNR: 0.0

DICTIONARY SIZE: 258

TP: 0.0  
FP: 4.0  
TN: 536.0  
FN: 0.0  
TPR: NaN  
FPR: 0.007407407407407408  
TNR: 0.9925925925925926  
FNR: NaN

DICTIONARY SIZE: 252

TP: 38.0  
FP: 9.0  
TN: 561.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.015789473684210527  
TNR: 0.9842105263157894  
FNR: 0.05

-----DYNAMIC WITH NO WEIGHT , DISCARD 5% freq\*length, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 61.0  
TN: 513.0  
FN: 0.0  
TPR: NaN  
FPR: 0.10627177700348432  
TNR: 0.8937282229965157  
FNR: NaN

DICTIONARY SIZE: 106

TP: 0.0  
FP: 32.0  
TN: 552.0  
FN: 0.0  
TPR: NaN  
FPR: 0.0547945205479452  
TNR: 0.9452054794520548  
FNR: NaN

DICTIONARY SIZE: 128

TP: 0.0  
FP: 18.0  
TN: 530.0  
FN: 0.0  
TPR: NaN  
FPR: 0.032846715328467155  
TNR: 0.9671532846715328  
FNR: NaN

DICTIONARY SIZE: 143

TP: 38.0  
FP: 7.0  
TN: 580.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.01192504258943782  
TNR: 0.9880749574105622  
FNR: 0.05

DICTIONARY SIZE: 197

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 206

TP: 0.0  
FP: 4.0  
TN: 579.0  
FN: 0.0  
TPR: NaN  
FPR: 0.00686106346483705  
TNR: 0.9931389365351629  
FNR: NaN

DICTIONARY SIZE: 206

TP: 40.0  
FP: 53.0  
TN: 532.0

FN: 0.0  
TPR: 1.0  
FPR: 0.0905982905982906  
TNR: 0.9094017094017094  
FNR: 0.0

DICTIONARY SIZE: 257

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 253

TP: 38.0  
FP: 10.0  
TN: 560.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.017543859649122806  
TNR: 0.9824561403508771  
FNR: 0.05

-----DYNAMIC WITH 0.9 WEIGHT , DISCARD 5% freq\*length, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 61.0  
TN: 513.0  
FN: 0.0  
TPR: NaN  
FPR: 0.10627177700348432  
TNR: 0.8937282229965157  
FNR: NaN

DICTIONARY SIZE: 107

TP: 0.0  
FP: 34.0  
TN: 550.0  
FN: 0.0  
TPR: NaN  
FPR: 0.05821917808219178  
TNR: 0.9417808219178082  
FNR: NaN

DICTIONARY SIZE: 117

TP: 0.0  
FP: 20.0  
TN: 528.0  
FN: 0.0  
TPR: NaN  
FPR: 0.0364963503649635

TNR: 0.9635036496350365  
FNR: NaN

DICTIONARY SIZE: 132

TP: 38.0  
FP: 12.0  
TN: 575.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.020442930153321975  
TNR: 0.979557069846678  
FNR: 0.05

DICTIONARY SIZE: 174

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 182

TP: 0.0  
FP: 4.0  
TN: 579.0  
FN: 0.0  
TPR: NaN  
FPR: 0.00686106346483705  
TNR: 0.9931389365351629  
FNR: NaN

DICTIONARY SIZE: 188

TP: 40.0  
FP: 50.0  
TN: 535.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.08547008547008547  
TNR: 0.9145299145299145  
FNR: 0.0

DICTIONARY SIZE: 240

TP: 0.0  
FP: 2.0  
TN: 538.0  
FN: 0.0  
TPR: NaN  
FPR: 0.003703703703703704  
TNR: 0.9962962962962963  
FNR: NaN

DICTIONARY SIZE: 240

TP: 38.0  
FP: 6.0  
TN: 564.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.010526315789473684  
TNR: 0.9894736842105263  
FNR: 0.05

-----DYNAMIC WITH 0.8 WEIGHT , DISCARD 5% freq\*length, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 61.0  
TN: 513.0  
FN: 0.0  
TPR: NaN  
FPR: 0.10627177700348432  
TNR: 0.8937282229965157  
FNR: NaN

DICTIONARY SIZE: 107

TP: 0.0  
FP: 34.0  
TN: 550.0  
FN: 0.0  
TPR: NaN  
FPR: 0.05821917808219178  
TNR: 0.9417808219178082  
FNR: NaN

DICTIONARY SIZE: 117

TP: 0.0  
FP: 20.0  
TN: 528.0  
FN: 0.0  
TPR: NaN  
FPR: 0.0364963503649635  
TNR: 0.9635036496350365  
FNR: NaN

DICTIONARY SIZE: 132

TP: 38.0  
FP: 12.0  
TN: 575.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.020442930153321975  
TNR: 0.979557069846678  
FNR: 0.05

DICTIONARY SIZE: 171

TP: 0.0

FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 188

TP: 0.0  
FP: 4.0  
TN: 579.0  
FN: 0.0  
TPR: NaN  
FPR: 0.00686106346483705  
TNR: 0.9931389365351629  
FNR: NaN

DICTIONARY SIZE: 192

TP: 40.0  
FP: 42.0  
TN: 543.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.07179487179487179  
TNR: 0.9282051282051282  
FNR: 0.0

DICTIONARY SIZE: 241

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 233

TP: 39.0  
FP: 8.0  
TN: 562.0  
FN: 1.0  
TPR: 0.975  
FPR: 0.014035087719298246  
TNR: 0.9859649122807017  
FNR: 0.025

-----DYNAMIC WITH 0.7 WEIGHT , DISCARD 5% freq\*length, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 61.0  
TN: 513.0



FN: 0.0  
TPR: NaN  
FPR: 0.10627177700348432  
TNR: 0.8937282229965157  
FNR: NaN

DICTIONARY SIZE: 107

TP: 0.0  
FP: 34.0  
TN: 550.0  
FN: 0.0  
TPR: NaN  
FPR: 0.05821917808219178  
TNR: 0.9417808219178082  
FNR: NaN

DICTIONARY SIZE: 120

TP: 0.0  
FP: 19.0  
TN: 529.0  
FN: 0.0  
TPR: NaN  
FPR: 0.03467153284671533  
TNR: 0.9653284671532847  
FNR: NaN

DICTIONARY SIZE: 131

TP: 38.0  
FP: 12.0  
TN: 575.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.020442930153321975  
TNR: 0.979557069846678  
FNR: 0.05

DICTIONARY SIZE: 174

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 184

TP: 0.0  
FP: 4.0  
TN: 579.0  
FN: 0.0  
TPR: NaN  
FPR: 0.00686106346483705  
TNR: 0.9931389365351629

FNR: NaN

DICTIONARY SIZE: 179

TP: 40.0  
FP: 49.0  
TN: 536.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.08376068376068375  
TNR: 0.9162393162393162  
FNR: 0.0

DICTIONARY SIZE: 234

TP: 0.0  
FP: 2.0  
TN: 538.0  
FN: 0.0  
TPR: NaN  
FPR: 0.003703703703703704  
TNR: 0.9962962962962963  
FNR: NaN

DICTIONARY SIZE: 239

TP: 39.0  
FP: 8.0  
TN: 562.0  
FN: 1.0  
TPR: 0.975  
FPR: 0.014035087719298246  
TNR: 0.9859649122807017  
FNR: 0.025

-----DYNAMIC WITH 0.6 WEIGHT , DISCARD 5% freq\*length, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 61.0  
TN: 513.0  
FN: 0.0  
TPR: NaN  
FPR: 0.10627177700348432  
TNR: 0.8937282229965157  
FNR: NaN

DICTIONARY SIZE: 109

TP: 0.0  
FP: 34.0  
TN: 550.0  
FN: 0.0  
TPR: NaN  
FPR: 0.05821917808219178  
TNR: 0.9417808219178082  
FNR: NaN

DICTIONARY SIZE: 130

TP: 0.0  
FP: 21.0  
TN: 527.0  
FN: 0.0  
TPR: NaN  
FPR: 0.03832116788321168  
TNR: 0.9616788321167883  
FNR: NaN

DICTIONARY SIZE: 133

TP: 38.0  
FP: 8.0  
TN: 579.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.013628620102214651  
TNR: 0.9863713798977853  
FNR: 0.05

DICTIONARY SIZE: 179

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 189

TP: 0.0  
FP: 6.0  
TN: 577.0  
FN: 0.0  
TPR: NaN  
FPR: 0.010291595197255575  
TNR: 0.9897084048027445  
FNR: NaN

DICTIONARY SIZE: 186

TP: 40.0  
FP: 43.0  
TN: 542.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.0735042735042735  
TNR: 0.9264957264957265  
FNR: 0.0

DICTIONARY SIZE: 256

TP: 0.0  
FP: 1.0

TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 249

TP: 38.0  
FP: 16.0  
TN: 554.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.028070175438596492  
TNR: 0.9719298245614035  
FNR: 0.05

-----DYNAMIC WITH 0.5 WEIGHT , DISCARD 5% freq\*length, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 61.0  
TN: 513.0  
FN: 0.0  
TPR: NaN  
FPR: 0.10627177700348432  
TNR: 0.8937282229965157  
FNR: NaN

DICTIONARY SIZE: 109

TP: 0.0  
FP: 34.0  
TN: 550.0  
FN: 0.0  
TPR: NaN  
FPR: 0.05821917808219178  
TNR: 0.9417808219178082  
FNR: NaN

DICTIONARY SIZE: 128

TP: 0.0  
FP: 19.0  
TN: 529.0  
FN: 0.0  
TPR: NaN  
FPR: 0.03467153284671533  
TNR: 0.9653284671532847  
FNR: NaN

DICTIONARY SIZE: 135

TP: 38.0  
FP: 13.0  
TN: 574.0  
FN: 2.0  
TPR: 0.95

FPR: 0.022146507666098807  
TNR: 0.9778534923339012  
FNR: 0.05

DICTIONARY SIZE: 179

TP: 0.0  
FP: 3.0  
TN: 537.0  
FN: 0.0  
TPR: NaN  
FPR: 0.005555555555555556  
TNR: 0.9944444444444445  
FNR: NaN

DICTIONARY SIZE: 170

TP: 0.0  
FP: 2.0  
TN: 581.0  
FN: 0.0  
TPR: NaN  
FPR: 0.003430531732418525  
TNR: 0.9965694682675815  
FNR: NaN

DICTIONARY SIZE: 178

TP: 40.0  
FP: 47.0  
TN: 538.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.08034188034188035  
TNR: 0.9196581196581196  
FNR: 0.0

DICTIONARY SIZE: 238

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 221

TP: 38.0  
FP: 17.0  
TN: 553.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.02982456140350877  
TNR: 0.9701754385964912  
FNR: 0.05

-----DYNAMIC WITH 0.4 WEIGHT , DISCARD 5% freq\*length, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 61.0  
TN: 513.0  
FN: 0.0  
TPR: NaN  
FPR: 0.10627177700348432  
TNR: 0.8937282229965157  
FNR: NaN

DICTIONARY SIZE: 110

TP: 0.0  
FP: 32.0  
TN: 552.0  
FN: 0.0  
TPR: NaN  
FPR: 0.0547945205479452  
TNR: 0.9452054794520548  
FNR: NaN

DICTIONARY SIZE: 132

TP: 0.0  
FP: 19.0  
TN: 529.0  
FN: 0.0  
TPR: NaN  
FPR: 0.03467153284671533  
TNR: 0.9653284671532847  
FNR: NaN

DICTIONARY SIZE: 140

TP: 38.0  
FP: 8.0  
TN: 579.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.013628620102214651  
TNR: 0.9863713798977853  
FNR: 0.05

DICTIONARY SIZE: 192

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 182

TP: 0.0  
FP: 4.0  
TN: 579.0  
FN: 0.0  
TPR: NaN  
FPR: 0.00686106346483705  
TNR: 0.9931389365351629  
FNR: NaN

DICTIONARY SIZE: 195

TP: 40.0  
FP: 45.0  
TN: 540.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.07692307692307693  
TNR: 0.9230769230769231  
FNR: 0.0

DICTIONARY SIZE: 251

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 246

TP: 37.0  
FP: 13.0  
TN: 557.0  
FN: 3.0  
TPR: 0.925  
FPR: 0.02280701754385965  
TNR: 0.9771929824561404  
FNR: 0.075

-----DYNAMIC WITH 0.3 WEIGHT , DISCARD 5% freq\*length, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 61.0  
TN: 513.0  
FN: 0.0  
TPR: NaN  
FPR: 0.10627177700348432  
TNR: 0.8937282229965157  
FNR: NaN

DICTIONARY SIZE: 106

TP: 0.0  
FP: 33.0  
TN: 551.0

FN: 0.0  
TPR: NaN  
FPR: 0.05650684931506849  
TNR: 0.9434931506849316  
FNR: NaN

DICTIONARY SIZE: 120

TP: 0.0  
FP: 22.0  
TN: 526.0  
FN: 0.0  
TPR: NaN  
FPR: 0.040145985401459854  
TNR: 0.9598540145985401  
FNR: NaN

DICTIONARY SIZE: 128

TP: 38.0  
FP: 10.0  
TN: 577.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.017035775127768313  
TNR: 0.9829642248722317  
FNR: 0.05

DICTIONARY SIZE: 171

TP: 0.0  
FP: 10.0  
TN: 530.0  
FN: 0.0  
TPR: NaN  
FPR: 0.018518518518518517  
TNR: 0.9814814814814815  
FNR: NaN

DICTIONARY SIZE: 168

TP: 0.0  
FP: 6.0  
TN: 577.0  
FN: 0.0  
TPR: NaN  
FPR: 0.010291595197255575  
TNR: 0.9897084048027445  
FNR: NaN

DICTIONARY SIZE: 158

TP: 40.0  
FP: 45.0  
TN: 540.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.07692307692307693  
TNR: 0.9230769230769231



FNR: 0.0

DICTIONARY SIZE: 231

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 227

TP: 38.0  
FP: 13.0  
TN: 557.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.02280701754385965  
TNR: 0.9771929824561404  
FNR: 0.05

-----DYNAMIC WITH 0.2 WEIGHT , DISCARD 5% freq\*length, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 61.0  
TN: 513.0  
FN: 0.0  
TPR: NaN  
FPR: 0.10627177700348432  
TNR: 0.8937282229965157  
FNR: NaN

DICTIONARY SIZE: 106

TP: 0.0  
FP: 33.0  
TN: 551.0  
FN: 0.0  
TPR: NaN  
FPR: 0.05650684931506849  
TNR: 0.9434931506849316  
FNR: NaN

DICTIONARY SIZE: 129

TP: 0.0  
FP: 19.0  
TN: 529.0  
FN: 0.0  
TPR: NaN  
FPR: 0.03467153284671533  
TNR: 0.9653284671532847  
FNR: NaN

DICTIONARY SIZE: 129

TP: 38.0  
FP: 7.0  
TN: 580.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.01192504258943782  
TNR: 0.9880749574105622  
FNR: 0.05

DICTIONARY SIZE: 174

TP: 0.0  
FP: 4.0  
TN: 535.0  
FN: 0.0  
TPR: NaN  
FPR: 0.0074211502782931356  
TNR: 0.9925788497217068  
FNR: NaN

DICTIONARY SIZE: 166

TP: 0.0  
FP: 6.0  
TN: 577.0  
FN: 0.0  
TPR: NaN  
FPR: 0.010291595197255575  
TNR: 0.9897084048027445  
FNR: NaN

DICTIONARY SIZE: 184

TP: 40.0  
FP: 50.0  
TN: 535.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.08547008547008547  
TNR: 0.9145299145299145  
FNR: 0.0

DICTIONARY SIZE: 243

TP: 0.0  
FP: 2.0  
TN: 538.0  
FN: 0.0  
TPR: NaN  
FPR: 0.003703703703703704  
TNR: 0.9962962962962963  
FNR: NaN

DICTIONARY SIZE: 244

TP: 38.0  
FP: 16.0

TN: 554.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.028070175438596492  
TNR: 0.9719298245614035  
FNR: 0.05

-----DYNAMIC WITH 0.1 WEIGHT , DISCARD 5% freq\*length, WITH ENHANCEMENTS

DICTIONARY SIZE: 68

TP: 0.0  
FP: 61.0  
TN: 513.0  
FN: 0.0  
TPR: NaN  
FPR: 0.10627177700348432  
TNR: 0.8937282229965157  
FNR: NaN

DICTIONARY SIZE: 106

TP: 0.0  
FP: 33.0  
TN: 551.0  
FN: 0.0  
TPR: NaN  
FPR: 0.05650684931506849  
TNR: 0.9434931506849316  
FNR: NaN

DICTIONARY SIZE: 127

TP: 0.0  
FP: 19.0  
TN: 529.0  
FN: 0.0  
TPR: NaN  
FPR: 0.03467153284671533  
TNR: 0.9653284671532847  
FNR: NaN

DICTIONARY SIZE: 130

TP: 38.0  
FP: 6.0  
TN: 581.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.010221465076660987  
TNR: 0.989778534923339  
FNR: 0.05

DICTIONARY SIZE: 178

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN

FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 167

TP: 0.0  
FP: 5.0  
TN: 578.0  
FN: 0.0  
TPR: NaN  
FPR: 0.008576329331046312  
TNR: 0.9914236706689536  
FNR: NaN

DICTIONARY SIZE: 181

TP: 40.0  
FP: 48.0  
TN: 537.0  
FN: 0.0  
TPR: 1.0  
FPR: 0.08205128205128205  
TNR: 0.9179487179487179  
FNR: 0.0

DICTIONARY SIZE: 236

TP: 0.0  
FP: 1.0  
TN: 539.0  
FN: 0.0  
TPR: NaN  
FPR: 0.001851851851851852  
TNR: 0.9981481481481481  
FNR: NaN

DICTIONARY SIZE: 237

TP: 38.0  
FP: 8.0  
TN: 562.0  
FN: 2.0  
TPR: 0.95  
FPR: 0.014035087719298246  
TNR: 0.9859649122807017  
FNR: 0.05