t10_minSup-Copy1

March 22, 2023

[1]:
```
import spatialFrequent as sp
import spatialFrequentNew as spn
import pandas as pd
```

[2]:
```
inputFile = 'T10_uncertain.txt'
seperator = ' '
minimumSupportCountList = [40, 60, 100, 140, 160, 180, 200]

result = pd.DataFrame(columns=['algorithm', 'minSup','patterns', 'runtime',␣
 ↪'memory'])
#initialize a data frame to store the results of PFECLAT algorithm
```

[3]:
```
algorithm = 'GPFP-Miner-New'  #specify the algorithm name
for minSupCount in minimumSupportCountList:
    obj1 = spn.GFPGrowth(inputFile, nFile='t10_neighbours_60.txt',␣
 ↪minSup=minSupCount, sep=seperator)
    obj1.startMine()
    #store the results in the data frame
    result.loc[result.shape[0]] = [algorithm, minSupCount,len(obj1.
 ↪getPatterns()), obj1.getRuntime(), obj1.getMemoryRSS()]
```

```
Frequent patterns were generated from uncertain databases successfully using GFP
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```

[4]:
```
print(result)
```

```
        algorithm  minSup  patterns     runtime     memory
0  GPFP-Miner-New      40      2274  276.826679  678735872
1  GPFP-Miner-New      60      1503  277.025517  678191104
2  GPFP-Miner-New     100       876  278.807609  675930112
3  GPFP-Miner-New     140       719  278.839108  671707136
4  GPFP-Miner-New     160       679  277.060108  669077504
5  GPFP-Miner-New     180       640  275.877822  664870912
6  GPFP-Miner-New     200       598  274.315286  659771392
```

[7]:
```
import PUFGrowth as pf
minimumSupportCountList = [140, 160, 180, 200]
algorithm = 'PUFGrowth'  #specify the algorithm name
for minSupCount in minimumSupportCountList:
    obj1 = pf.PUFGrowth(inputFile, minSup=minSupCount, sep=seperator)
    obj1.startMine()
    #store the results in the data frame
    result.loc[result.shape[0]] = [algorithm, minSupCount,len(obj1.
 ↪getPatterns()), obj1.getRuntime(), obj1.getMemoryRSS()]
```

```
Uncertain Frequent patterns were generated successfully using PUFGrowth
algorithm
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```

[9]:
```
import PUFGrowth as pf
minimumSupportCountList = [100, 60, 40]
algorithm = 'PUFGrowth'  #specify the algorithm name
for minSupCount in minimumSupportCountList:
    obj1 = pf.PUFGrowth(inputFile, minSup=minSupCount, sep=seperator)
    obj1.startMine()
    #store the results in the data frame
    result.loc[result.shape[0]] = [algorithm, minSupCount,len(obj1.
 ↪getPatterns()), obj1.getRuntime(), obj1.getMemoryRSS()]
```

```
Uncertain Frequent patterns were generated successfully using PUFGrowth
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```

[10]:
```
print(result)
```

```
        algorithm  minSup  patterns     runtime     memory
```

0	GPFP-Miner-New	40	2274	276.826679	678735872
1	GPFP-Miner-New	60	1503	277.025517	678191104
2	GPFP-Miner-New	100	876	278.807609	675930112
3	GPFP-Miner-New	140	719	278.839108	671707136
4	GPFP-Miner-New	160	679	277.060108	669077504
5	GPFP-Miner-New	180	640	275.877822	664870912
6	GPFP-Miner-New	200	598	274.315286	659771392
7	PUFGrowth	140	825	106.546629	693968896
8	PUFGrowth	160	734	106.470959	691335168
9	PUFGrowth	180	673	106.192940	686977024
10	PUFGrowth	200	618	104.892935	681869312
11	PUFGrowth	100	1242	300.571790	699867136
12	PUFGrowth	60	2917	654.210185	704344064
13	PUFGrowth	40	5155	1093.819506	707043328

[ ]:
```
from PAMI.extras.graph import generateLatexFileFromDataFrame as gdf
gdf.generateLatexCode(result)
```

[ ]:
```

```