

# Fukushima\_Congestion\_experiments-Copy3

June 3, 2023

```
[1]: import FFI_newVersion_Congestion as alg
import pandas as pd
inputFile = 'updated_congestion_5.txt'

minimumSupportCountList = [100, 105, 110, 115, 120, 125, 130] #Users can also
    ↪ specify this constraint between 0 to 1.
seperator = '\t'
result = pd.DataFrame(columns=['algorithm', 'minSup', 'patterns', 'runtime',
    ↪ 'memory'])
#initialize a data frame to store the results of FFIMiner algorithm

algorithm = 'FFI' #specify the algorithm name
for minSupCount in minimumSupportCountList:
    obj = alg.FFIMiner(iFile=inputFile, minSup=minSupCount, sep=seperator)
    obj.startMine()
    obj.save('congestion_patterns.txt')
    #store the results in the data frame
    result.loc[result.shape[0]] = [algorithm, minSupCount, len(obj.
    ↪ getPatterns()), obj.getRuntime(), obj.getMemoryRSS()]

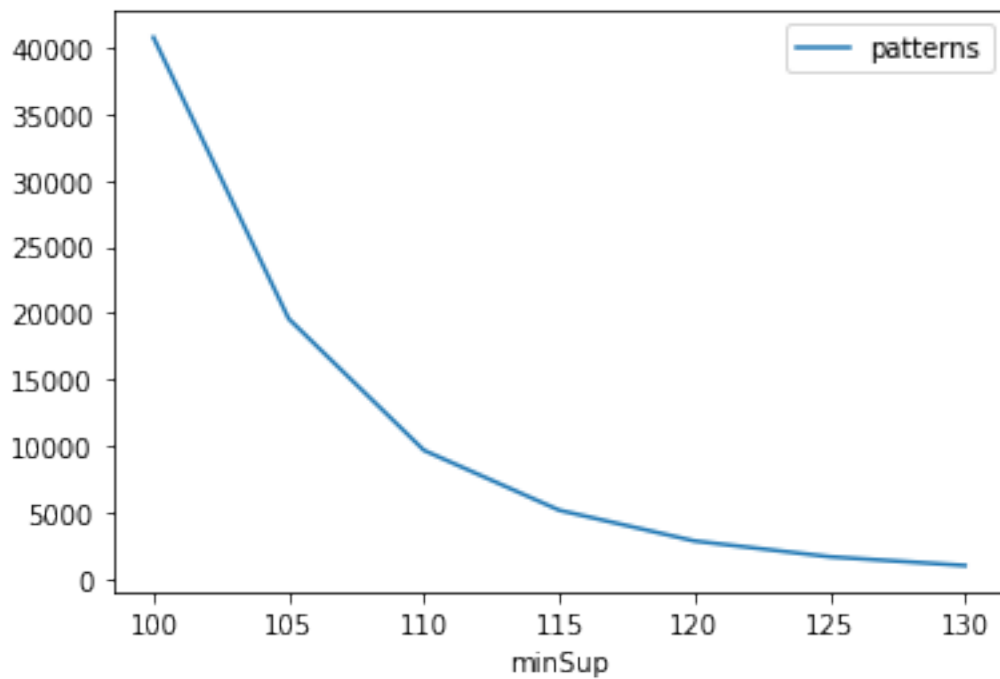
print(result)
```

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1461
11019
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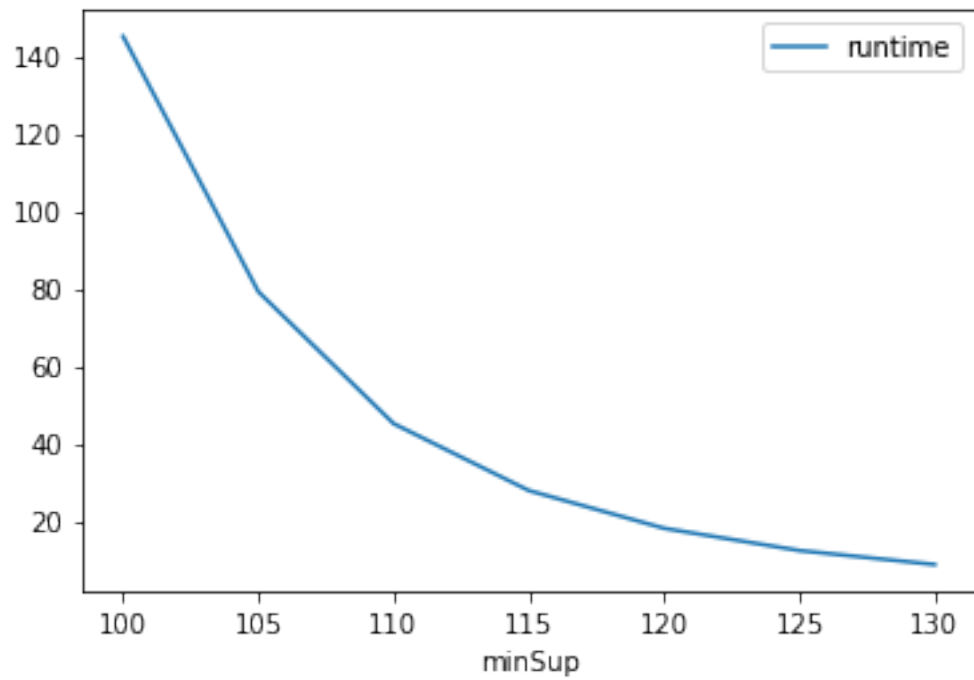
	algorithm	minSup	patterns	runtime	memory
0	FFI	100	40764	145.049374	231223296

1	FFI	105	19580	79.128715	223105024
2	FFI	110	9680	45.062253	219099136
3	FFI	115	5170	27.780133	216236032
4	FFI	120	2855	18.029947	215154688
5	FFI	125	1666	12.292263	214167552
6	FFI	130	1007	8.683164	213069824

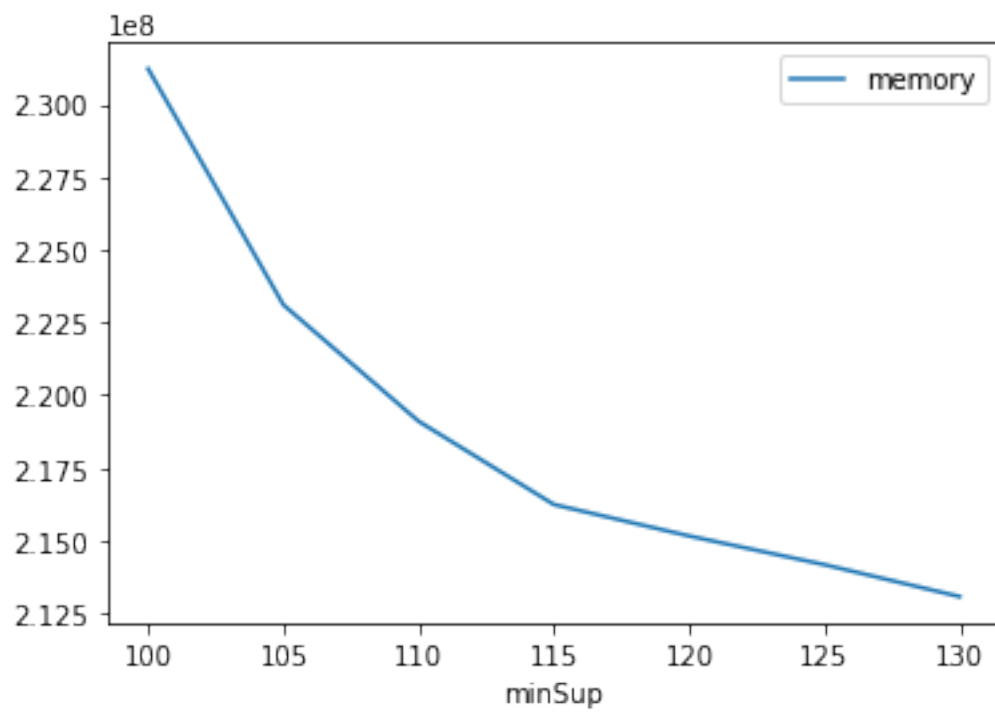
```
[2]: from PAMI.extras.graph import plotLineGraphsFromDataFrame as plt
ab = plt.plotGraphsFromDataFrame(result)
ab.plotGraphsFromDataFrame() #drawPlots()
```



Graph for No Of Patterns is successfully generated!



Graph for Runtime taken is successfully generated!



Graph for memory consumption is successfully generated!

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

Latex files generated successfully

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[ ]:
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