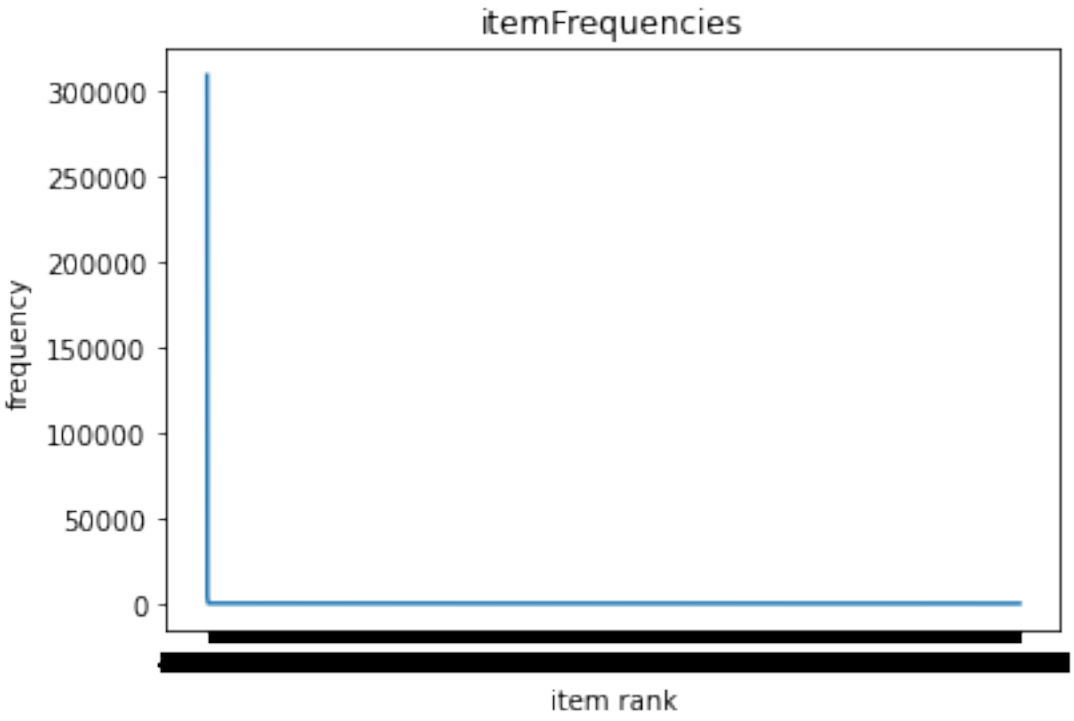
Untitled3

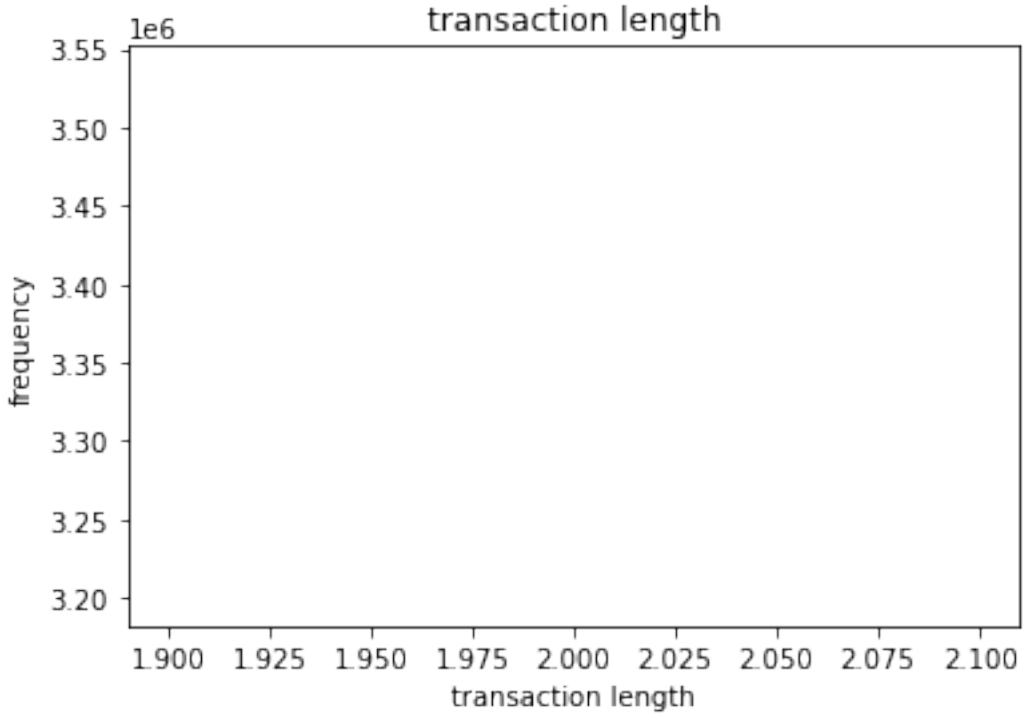
April 5, 2022

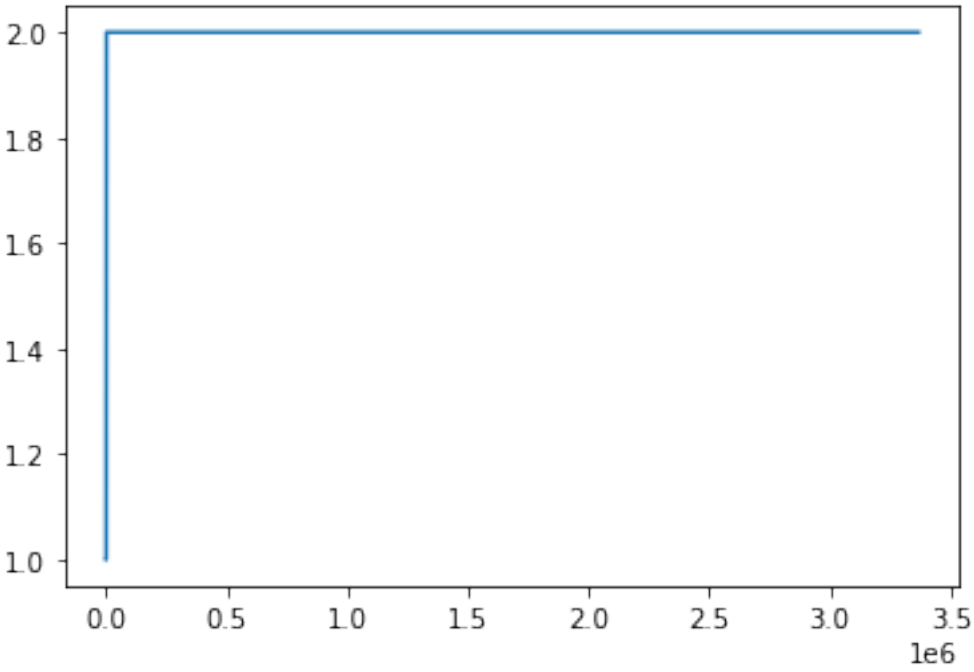
[5]:
```
import PAMI.extras.dbStats.temporalDatabaseStats as tds
import PAMI.extras.graph.plotLineGraphFromDictionary as plt

obj = tds.temporalDatabaseStats('temporal_BMS_POS.csv', sep=',')
obj.run()
print(f'Database size : {obj.getDatabaseSize()}')
print(f'Minimum Transaction Size : {obj.getMinimumTransactionLength()}')
print(f'Average Transaction Size : {obj.getAverageTransactionLength()}')
print(f'Maximum Transaction Size : {obj.getMaximumTransactionLength()}')
print(f'Standard Deviation Transaction Size : {obj.
  ↪getStandardDeviationTransactionLength()}')
print(f'Variance : {obj.getVarianceTransactionLength()}')
print(f'Sparsity : {obj.getSparsity()}')
print(f'Number of items : {obj.getTotalNumberOfItems()}')
print(f'Minimum period : {obj.getMinimumPeriod()}')
print(f'Average period : {obj.getAveragePeriod()}')
print(f'Maximum period : {obj.getMaximumPeriod()}')
itemFrequencies = obj.getSortedListOfItemFrequencies()
transactionLength = obj.getTransanctionalLengthDistribution()
numberOfTransactionPerTimeStamp = obj.getNumberOfTransactionsPerTimestamp()
# obj.save(itemFrequencies, 'itemFrequency.csv')
# obj.save(transactionLength, 'transactionSize.csv')
# obj.save(numberOfTransactionPerTimeStamp, 'numberOfTransaction.csv')
plt.plotLineGraphFromDictionary(itemFrequencies, 100, 'itemFrequencies', 'item␣
  ↪rank', 'frequency')
plt.plotLineGraphFromDictionary(transactionLength, 100, 'transaction length',␣
  ↪'transaction length', 'frequency')
plt.plotLineGraphFromDictionary(numberOfTransactionPerTimeStamp, 100)
```

```
Database size : 3367020
Minimum Transaction Size : 2
Average Transaction Size : 2.0
Maximum Transaction Size : 2
Standard Deviation Transaction Size : 0.0
Variance : 0
Sparsity : 0.9999961210090031
Number of items : 515598
Minimum period : 1
```

```
Average period : 1.0
Maximum period : 1
```







[5]: <PAMI.extras.graph.plotLineGraphFromDictionary.plotLineGraphFromDictionary at 0x7f4f3e1c7fa0>

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