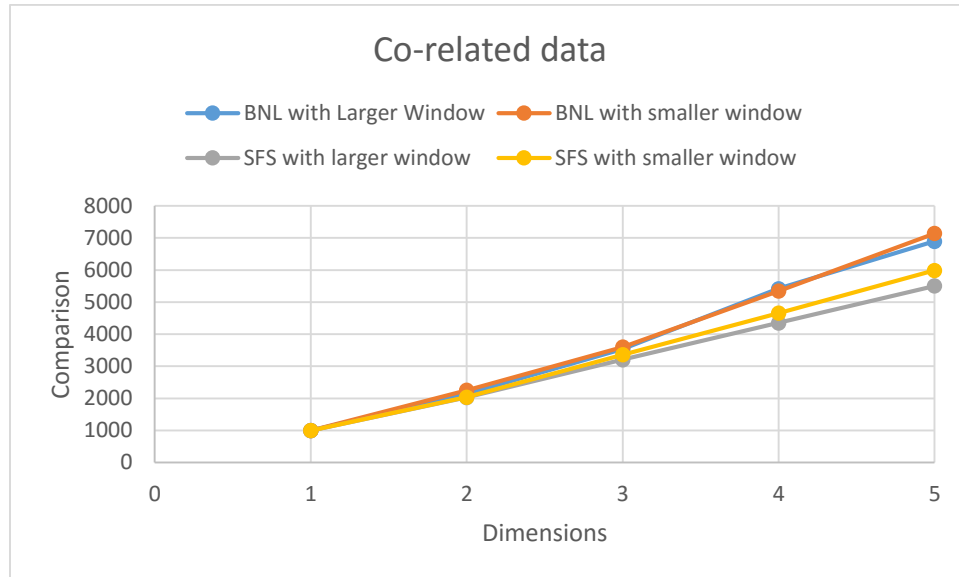


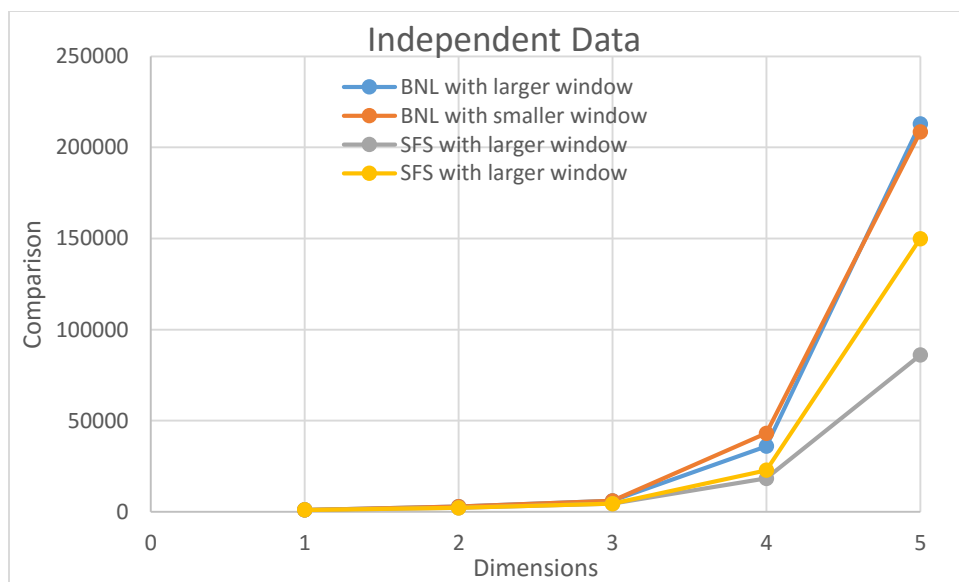
Assignment-1

For Co-related Data:



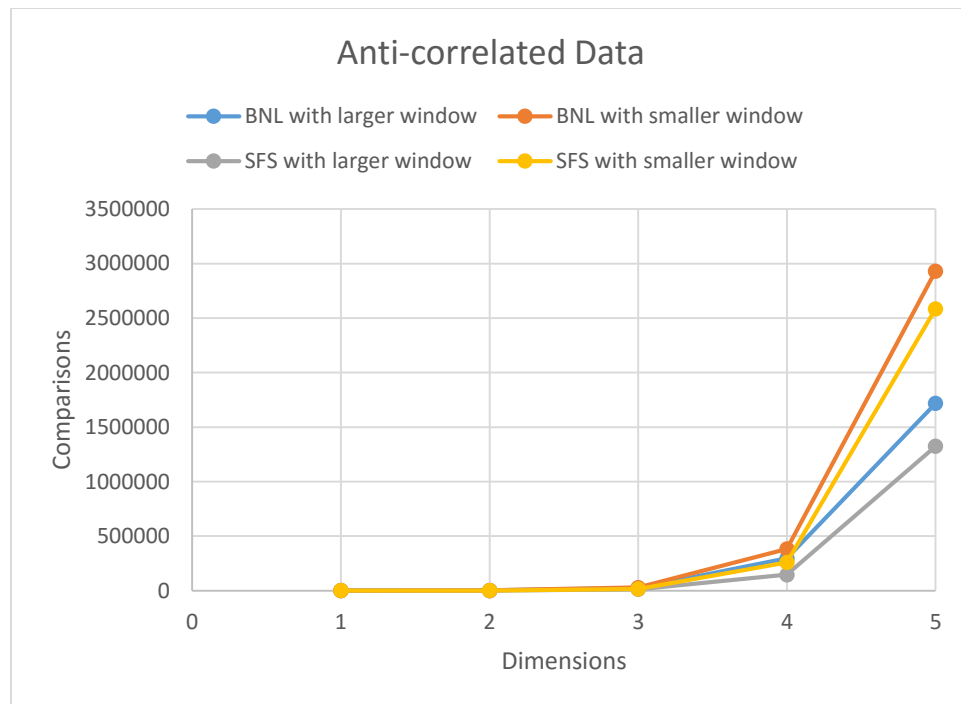
- For co-related data, above graph displays that SFS performs better than BNL. This graph is made from [this](#) data. Time requirement for SFS is much more than BNL.

For Independent Data:



- From the graph we can say that graph grows exponentially with the increase in dimensions. SFS required less no of comparison but with more time. So or the larger amount of data SFS works better than BNL. For smaller data set BNL is more responsive than SFS. The data which is used to build this graph is [here](#).

For Anti-correlated Data:



- For anti-correlated data we can easily show that after certain point both the algorithm increases exponentially. Comparison for BNL is high so for anti-correlated data it is convenient to use SFS rather than BNL.
- BNL gives high performance when data is co-related and small in amount. But real time data is not co-related. Most of the time data is anti-correlated so SFS works better than BNL.

The analysis and raw data for graphs are available [here](#).