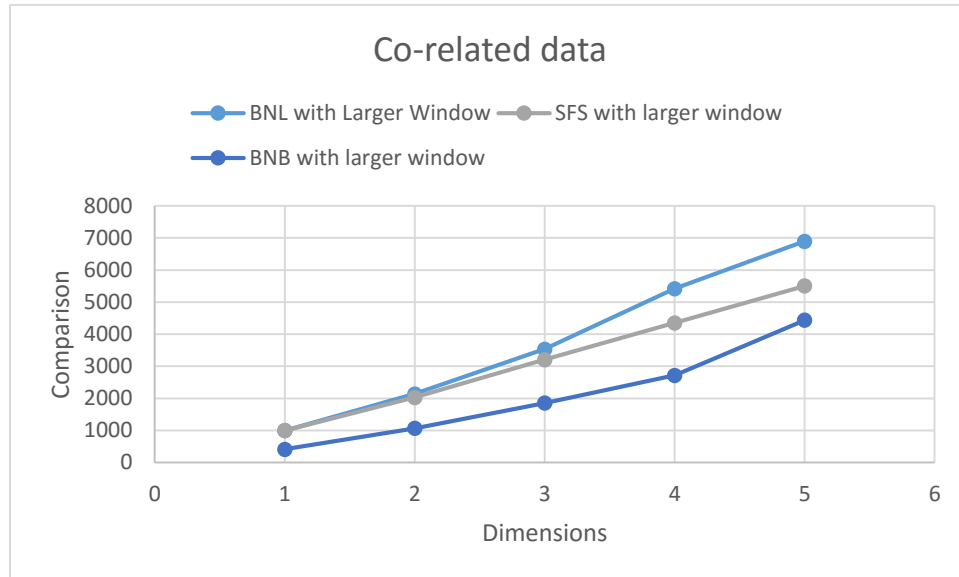


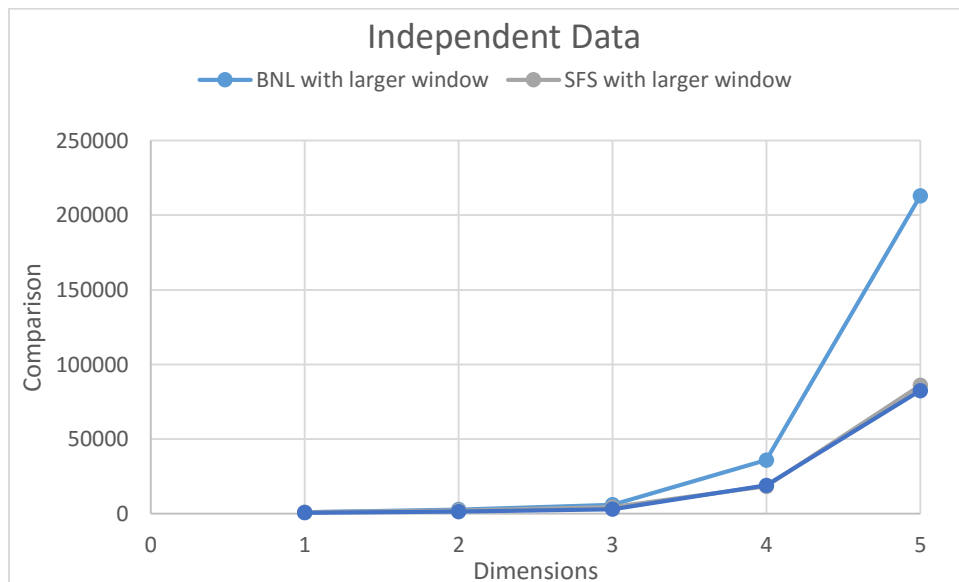
Assignment-2

For Co-related Data:



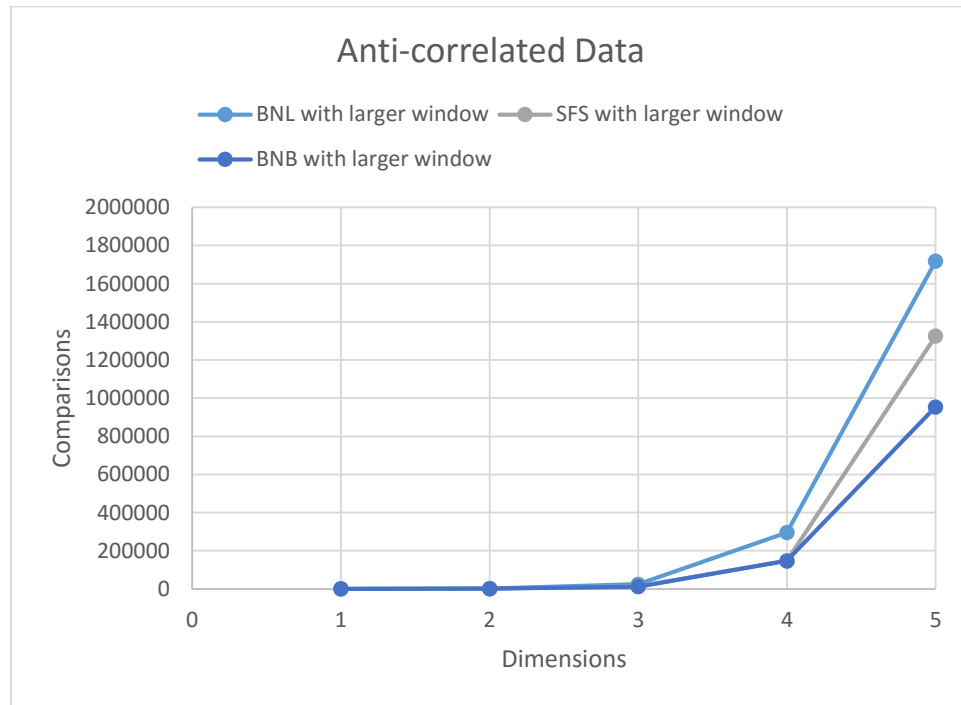
- For co-related data, above graph displays that BNB performs better than SFS and BNL. This graph is made from [this](#) data. Time requirement for BNB is much more than BNL and SFS if we consider the building of RTree.

For Independent Data:



- From the graph we can say that graph grows exponentially with the increase in dimensions. BNB and SFS required less no of comparison but with more time. So or the larger amount of data BNB and SFS works better than BNL. 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 all three algorithms increases exponentially. Comparison for BNL is high so for anti-correlated data it is convenient to use BNB rather than SFS and BNL iff RTree is already bulidied.
- 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 BNB works better than BNL and SFS.

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