

Aim : To perform various OLAP operations such as slice, dice, drilldown, rollup, pivot.

Theory : OLAP is an acronym for online analytical processing. An OLAP system manages large amount of historical data, provides facilities for summarization & aggregation, and stores and manages information at different levels of granularity.

#### OLAP operators

- 1) Slice - A slice is a subset of a multidimensional array considering to a single value for one or more members of the dimensions not in the subset.
- 2) Dice - The dice operation is a slice on more than 2 dimensions of the datacube (or more than two consecutive slices).
- 3) Drill Down - Drilling down is a specific analytical technique whereby the user navigates among levels of data ranging from the most summarised to the most detailed.
- 4) Roll up - A rollup involves computing all of the data relationships for one or more dimensions. To do this, a computational relationship or formula might be defined for the same.
- 5) Pivot - It is also known as rotation. Mainly to change the dimensional orientation of a report or page display.

Conclusion: Thus we have successfully implemented different OLAP operations