## **CLIQUE: Grid-Based Subspace Clustering**

- □ CLIQUE (Clustering In QUEst) (Agrawal, Gehrke, Gunopulos, Raghavan: SIGMOD'98)
- CLIQUE is a density-based and grid-based subspace clustering algorithm
  - ☐ **Grid-based**: It discretizes the data space through a grid and estimates the density by counting the number of points in a grid cell
  - □ **Density-based**: A cluster is a maximal set of connected dense units in a subspace
    - A unit is dense if the fraction of total data points contained in the unit exceeds the input model parameter
  - **Subspace clustering**: A subspace cluster is a set of neighboring dense cells in an arbitrary subspace. It also discovers some minimal descriptions of the clusters
- □ It automatically identifies subspaces of a high dimensional data space that allow better clustering than original space using the Apriori principle