UNIT V PREDICTIVE MODELING OF BIG DATA AND TRENDS INDATA MINING 9

Statistics and Data Analysis – EDA – Small and Big Data –Logistic Regression Model – Ordinary Regression Model-Mining complex data objects – Spatial databases – Temporal databases – Multimedia databases – Time series and sequence data – Text mining – Web mining – Applications in Data mining
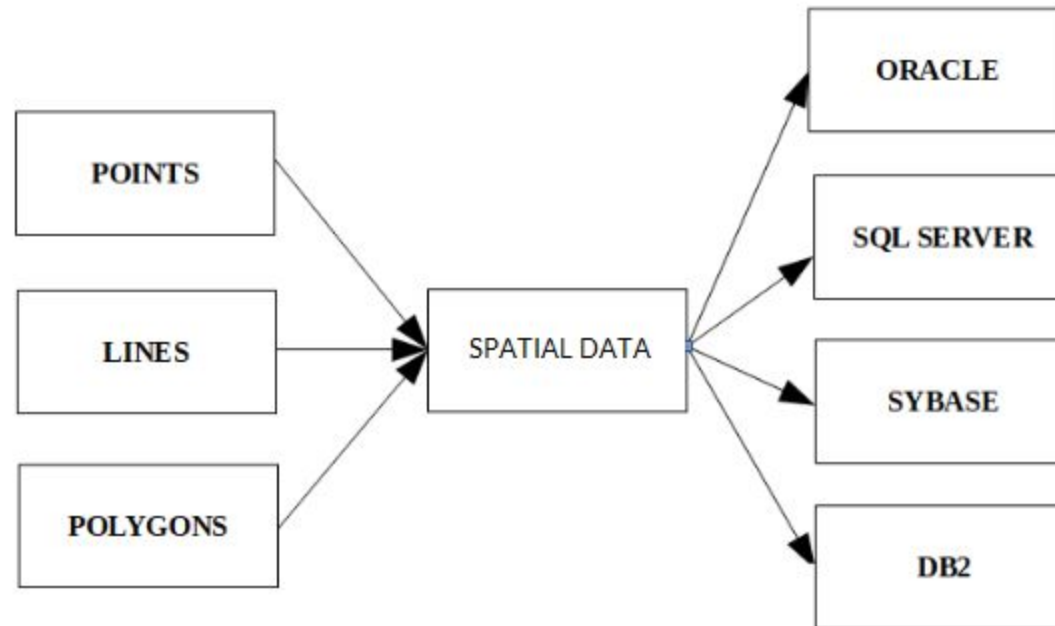
Spatial databases

- Spatial data is associated with geographic locations such as cities,towns etc. A spatial database is optimized to store and query data representing objects. These are the objects which are defined in a geometric space.

Characteristics of Spatial Database

- A spatial database system has the following characteristics
- It is a database system
- It offers spatial data types (SDTs) in its data model and query language.
- It supports spatial data types in its implementation, providing at least spatial indexing and efficient algorithms for spatial join.

Example

- A road map is a visualization of geographic information. A road map is a 2-dimensional object which contains points, lines, and polygons that can represent cities, roads, and political boundaries such as states or provinces.

- In general, spatial data can be of two types –

- Vector data: This data is represented as discrete points, lines and polygons

- Rastor data: This data is represented as a matrix of square cells.

The spatial data in the form of points, lines, polygons etc. is used by many different databases as shown above.