Motivation

- When a DFD is developed we have knowledge of all data elements required by an application.
- Data dictionary lists all data elements but does not say anything about relationships between data elements.
- Relationships are needed to logically group data elements into related sets or tables.
- ✤ Such an organization
 - Reduces data duplication
 - Simplifies adding, deleting and updating data
 - Simplifies retrieval of desired data
- ✤ Logical databases give conceptual model..
- Logical databases need to be stored in physical media such as a hard disk for use by applications.
- A system is needed to map the logical database to a physical medium, which is transparent to an application program..
- ✤ Database management systems achieve this purpose.