







# LEVELS OF ABSTRACTION



# Data Structure



Formal symbolic representation of specific things in the data model

► Organized set of files for managing defined entities in the data model (formalized in the data structure)



**Files Structure**





# Computer representation of files

# LEVELS OF ABSTRACTION

### ▶ **Data Structure**

- ▶ Formal symbolic representation of specific things in the data model
- ▶ Organized set of files for managing defined entities in the data model (formalized in the data structure)

### ▶ **File Structure**

- ▶ Computer representation of files

# OBJECTS

- ▶ Present a view of the world in which the Earth surface is populated by a number discrete entities (e.g., houses, streets, lakes)
- ▶ Objects can be 0-, 1-, 2-, or 3-dimensional
- ▶ Object types include points, lines, polygons, networks

