

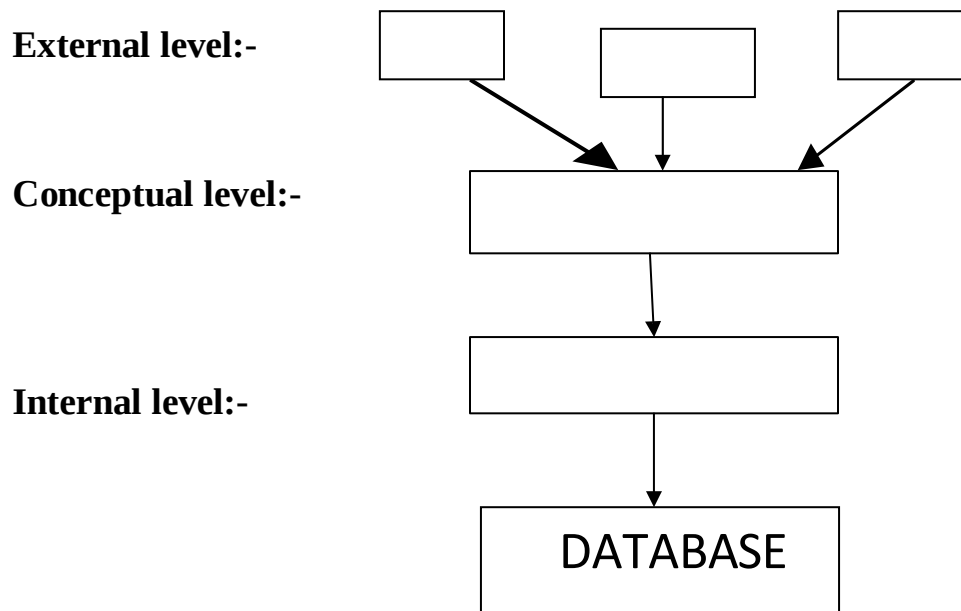
Disadvantages of DBMS

The disadvantages of the database approach are summarized as follows:

- 1. Complexity:** The provision of the functionality that is expected of a good DBMS makes the DBMS an extremely complex piece of software. Database designers, developers, database administrators and end-users must understand this functionality to take full advantage of it. Failure to understand the system can lead to bad design decisions, which can have serious consequences for an organization.
- 2. Size:** The complexity and breadth of functionality makes the DBMS an extremely large piece of software, occupying many mega bytes of disk space and requiring substantial amounts of memory to run efficiently.
- 3. Performance:** Typically, a File Based system is written for a specific application, such as invoicing. As result, performance is generally very good. However, the DBMS is written to be more general, to cater for many applications rather than just one. The effect is that some applications may not run as fast as they used to.
- 4. Higher impact of a failure:** The centralization of resources increases the value ability of the system. Since all users and applications rely on the value ability of the DBMS, the failure of any component can bring operations to a halt.
- 5. Cost of DBMS:** The cost of DBMS varies significantly, depending on the environment and functionality provided. There is also the recurrent annual maintenance cost.
- 6. Additional Hardware costs:** The disk storage requirements for the DBMS and the database may necessitate the purchase of additional storage space. Furthermore, to achieve the required performance it may be necessary to purchase a larger machine, perhaps even a machine dedicated to running the DBMS. The procurement of additional hardware results in further expenditure.
- 7. Cost of Conversion:** In some situations, the cost of the DBMS and extra hardware may be insignificant compared with the cost of converting existing applications to run on the new DBMS and hardware. This cost also includes the cost of training staff to use these new systems and

possibly the employment of specialist staff to help with conversion and running of the system. This cost is one of the main reasons why some organizations feel tied to their current systems and cannot switch to modern database technology.

Architecture of DBMS:-



The database architecture is divided into three parts:-

1. **External level:** It is the top level of database architecture. There each user only consults with its database using this we can access any information present in its database. There is more than one external level database present in any database.
2. **Conceptual level:** The collection of all external level databases is called conceptual level database at this level all information regarding the organization for which the database is created. There is only one conceptual level database present in the database of an organization.
3. **Internal level:** -It's the last level of the database. It shows the physical storage of the database.