

# **DBMS OBJECTIVES**



- All the organizations are making a huge profit just because of database management system.
- DBMS provides a lot benefits to all these companies and there are lots of objectives of using a database management system.



- Data Availability
- Data integrity
- Data security
- Data independence
- Mass storage
- Multiple users access
- Backup and recovery



# Data availability

- Data availability refers to the fact that the data are made available to large variety of users in a meaningful format at reasonable cost so that the users can easily access the data.



# Data Integrity

- Data integrity refers to the completeness, correctness and consistency of data.
- It ensures that data entered into the database must be complete, accurate, valid, and consistent.
- Integrity is related to the quality of data, which is maintained with the help of integrity constraints. These constraints are the rules that are designed to keep data consistent and correct.

# Data Security:

- Data security refers to the fact that only authorized users can access the data.
- Data security can be enforced by passwords.
- If two separate users are accessing a particular data at the same time, the DBMS must not allow them to make conflicting changes.

# Data Independence

- DBMS supports the concept of data independence since it represents a system for managing data separately from programs that use the data.
- DBMS allows the user to store, update and retrieve data in an efficient manner. In order to store the information efficiently, complex data structures are used to represent the data.
- The system hides certain details of how the data are stored and maintained.

# Mass Storage

- DBMS can store a lot of data in it. So for all the big firms, DBMS is really ideal technology to use.
- It can store thousands of records in it and one can fetch all that data whenever it is needed.





# Multiple Users Access

- No one handles the whole database alone.
- There are lots of users who are able to access database.
- So this situation may happen that two or more users are accessing database.
- They can change whatever they want, at that time DBMS makes it sure that they can work concurrently.

# Data Backup and recovery

- Sometimes database failure occurs so there is no option like one can say that all the data has been lost.
- There should be a backup of database so that on database failure it can be recovered.
- DBMS has the ability to backup and recover all the data in database.

