# Database Development Process

1. Preliminary Study

* It is based on proper study of the system
* It means that all the parts of the systems, or the sections of the subject organization for which we intend to develop the system must be studied.
* We should find the relation or interaction of different section of the organization with each other and should understand the way information flows between different sections of the organization.
* It should be made clear that what processing is performed at each stage of the system.

1. Requirement Analysis

* Its functionality decision made at this stage decide the overall activity of the organization.
* Requirements of one section of the organization are fulfilled in such a way that all sections in the organization are supporting each other.
* For example we can say that the results produces by the processing taking place at one section are used as input for another section.

1. Database design

* This is technical phase of the process and need handsome skill as a database administrator. This is the phase where the logical design of the database created.
* Entities are identified and given attributes, relationships are built and different types of entity relationship are performed.

1. Physical Design

* The choice of the DBMS is made on the basis of requirements and the environment in which the system will operate.
* Implementing a database on a specific DBMS is very important because it involves the major financial investment of the organization, and cannot be reverted in case a selected DBMS in not capable of providing the desired efficiency.

1. Implementation

* This phase is specific to writing the application programs needed to carry out different activities according to use requirements.
* Different users may have different requirements of the data in the database, so the number of application programs is not known or fixed for all the organizations, it may vary for different organizations.

1. Maintenance of Database system

* Involve designing any new application for the enhancement of the system.
* Or an already working application may need to be updated or modified to remove any errors or to add some functionality in the system.