DBMS
1st Hour
Wednesday 22 December 2010

Today the first ever regular DBMS class for the fourth semester was taken by Mr. Sivasubramanian. The class was all about five types of database languages.

There are five types of **Database languages**; they are:

1. **D**ata **D**efinition **L**anguage (**DDL**)
2. **D**ata **M**anipulation **L**anguage (**DML**)
3. **D**ata **C**ontrol **L**anguage (**DCL**)
4. **D**ata **T**ransaction **L**anguage (**DTL**)
5. **D**ata **R**etrieval **L**anguage (**DRL**)

Each of the languages have been explained below.

<u>**D**ata **D**efinition **L**anguage (**DDL**)</u>

The Data Definition Language (DDL) is used to create and destroy databases and database objects. These commands will primarily be used by database administrators during the setup and removal phases of a database project. The three basic commands in the DDL are:

(i)   **CREATE** – Creates a variety of desired databases on your platform.
(ii)   **ALTER** – Makes change to the structure of a table without deleting and recreating it.
(iii)   **DROP** – Removes the entire database objects from the DBMS.

(Read more at: http://databases.about.com/od/sql/a/sqlfundamentals_2.htm)

<u>**D**ata **M**anipulation **L**anguage (**DML**)</u>

The Data Manipulation Language (DML) is used to retrieve, insert and modify database information. These commands will be used by all database users during the routine operation of the database. The three basic commands in DML are:

(i)   **INSERT** – Adds record(s) to an existing table.
(ii)   **UPDATE** – Modifies the content of a table, either in bulk or individually
(iii)   **DELETE** – Deletes a particular command from the table.

(Read more at: http://databases.about.com/od/sql/a/sqlfundamentals_3.htm)

Data Control Language (DCL)

The Data Control Language (DCL) is used to control access to a particular data in a database. The two basic commands in DCL are:

(i)   **GRANT** – Allows specified users to perform specified tasks.
(ii)   **REVOKE** – Cancel previously granted or denied permissions.

(Read more at: http://en.wikipedia.org/wiki/Data_Control_Language)

Data Transaction Language (DTL)

The Data Transaction Language (DTL) is used to control transactional processing in a database. The two basic commands in DTL are:

(i)   **ROLLBACK** – To undo all the transactions that were carried out earlier.   (For example, if a data is deleted, we can retrieve it back by the ROLLBACK command)
(ii)   **COMMIT** – To apply the transactions that were carried out. (For example, if the deletion of the data is committed then the data could never be retrieved)

Data Retrieval Language (DRL)

The Data Retrieval Language (DRT) is used to retrieve required data from a particular database. The basic command in DRL is

(i)   **SELECT** – This allows the user to retrieve a particular data from the database.

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