**PRACTICAL 1**

**Database Management Systems**

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**AIM**

**To Study the Database Languages, i.e., DDL and DML Commands**

**THEORY**

1. **Data Definition Language (DDL)**

* DDL changes the structure of the table like creating a table, deleting a table, altering a table, etc.
* All the command of DDL is auto committed that means it permanently save all the changes in the database.

4 types of Commands come under DDL which is:

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| **COMMAND** | **DEFINITION** | **SYNTAX** | **EXAMPLE** |
| **CREATE** | It is used to create a new table in the database | CREATE TABLE TABLE\_NAME (COLUMN\_NAME DATATYPES[,....]); | CREATE TABLE EMPLOYEE (Name VARCHAR2(20), Email VARCHAR2(100), DOB DATE); |
| **DROP** | It is used to delete both the structure and record stored in the table. | DROP TABLE; | DROP TABLE EMPLOYEE; |
| **ALTER** | It is used to alter the structure of the database. This change could be either to modify the characteristics of an existing attribute or probably to add a new attribute. | **To add a new column in the table:** ALTER TABLE table\_name ADD column\_name COLUMN-definition;  **To modify existing column in the table:** ALTER TABLE MODIFY(COLUMN DEFINITION....); | ALTER TABLE STU\_DETAILS ADD(ADDRESS VARCHAR2(20));  ALTER TABLE STU\_DETAILS MODIFY (NAME VARCHAR2(20)); |
| **TRUNCATE** | It is used to delete all the rows from the table and free the space containing the table. | TRUNCATE TABLE table\_name; | TRUNCATE TABLE EMPLOYEE; |

1. **Data Manipulation Language**

* DML commands are used to modify the database. It is responsible for all forms of changes in the database.
* The command of DML is not auto committed which means it can't permanently save all the changes in the database. They can be rollback.

3 types of Commands come under DDL which are:

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| **COMMAND** | **DEFINITION** | **SYNTAX** | **EXAMPLE** |
| **INSERT** | The INSERT statement is a SQL query. It is used to insert data into the row of a table. | 1. INSERT INTO TABLE\_NAME 2. (col1, col2, col3,.... col N) 3. VALUES (value1, value2, value3, .... valueN);   OR   1. INSERT INTO TABLE\_NAME 2. VALUES (value1, value2, value3, .... valueN); | INSERT INTO javatpoint (Author, Subject) VALUES ("Sonoo", "DBMS"); |
| **UPDATE** | This command is used to update or modify the value of a column in the table. | UPDATE table\_name SET [column\_name1= value1,...column\_nameN = valueN] [WHERE CON DITION] | 1. UPDATE students 2. SET User\_Name = 'Sonoo' 3. WHERE Student\_Id = '3' |
| **DELETE** | It is used to remove one or more rows from a table. | DELETE FROM table\_name [WHERE condition]; | 1. DELETE FROM javatpoint 2. WHERE Author="Sonoo" |

**CONCLUSION**

Hence, we can understand the 2 SQL Commands DDL and DML.