## EXPERIMENT NO. 03

**Aim**:-Introduction to DDL and create a basic table.

**Introduction:** Data Definition Language (DDL) is a subset of SQL (Structured Query Language) that focuses on defining and managing database schemas and objects. It consists of commands that allow users to create, alter, and delete database structures without affecting the actual data stored in them. DDL plays a fundamental role in database management as it establishes the blueprint for organizing data efficiently.

DDL is essential for database administrators and developers as it provides the necessary tools to set up and modify database systems. By using DDL, one can ensure that the structure of a database remains organized, secure, and optimized for queries and transactions.

**Explanation of Key DDL Commands:**

**CREATE**

- The CREATE command is used to define new database objects such as tables, indexes, and schemas.
- Example:

```
CREATE TABLE Employees (
  EmployeeID INT PRIMARY KEY,
  Name VARCHAR(100),
  Department VARCHAR(50),
  Salary DECIMAL(10,2)
);
```

**ALTER**

- The ALTER command modifies existing database objects, such as adding or removing columns in a table.
- Example:
- ALTER TABLE Employees ADD COLUMN DateOfBirth DATE;

**DROP**

- The DROP command removes database objects such as tables or indexes.
- Example:
  DROP TABLE Employees;

**TRUNCATE**

- The TRUNCATE command removes all records from a table but retains the structure for future use.
- Example:
- TRUNCATE TABLE Employees;

**COMMENT**

- The COMMENT command adds descriptive comments to database objects for documentation purposes.
- Example:
- COMMENT ON TABLE Employees IS 'Table storing employee details';

**RENAME**

- The RENAME command is used to change the name of a database object.
- Example:
- RENAME TABLE Employees TO Staff;

**Code:**

```
create database hopital;
use hospital;
create table patient(
patient_no int primary key,
name varchar(50),
medicine_bill int not null,
age int);
insert into patient
(patient_no,name,medicine_bill,age)
value
(101,"sona",100000,20),
(102,"ramesh",100000,20),
(103,"anaaya",100000,20),
(104,"ranbir",100000,20),
(105,"kajal",100000,20),
(106,"ohani",100000,20),
(11,"swati",100000,20),
(10,"kashish",100000,20),
(1,"niraz",100000,20),
(12,"athrav",100000,20),
(14,"ruti",100000,20),
(3,"mona",100000,20),
(51,"ankit",100000,20),
(91,"nisha",100000,20),
```

**OUTPUT:**

Result Grid | Filter Rows:

| patient_no | name | medicine_bill | age |
|---|---|---|---|
| 1 | niraz | 100000 | 20 |
| 3 | mona | 100000 | 20 |
| 4 | ayal | 100000 | 20 |
| 10 | kashish | 100000 | 20 |
| 11 | swati | 100000 | 20 |
| 12 | athrav | 100000 | 20 |
| 14 | ruti | 100000 | 20 |
| 16 | ansh | 100000 | 20 |
| 51 | ankit | 100000 | 20 |
| 71 | gudiya | 100000 | 20 |
| 91 | nisha | 100000 | 20 |
| 101 | sona | 100000 | 20 |
| 102 | ramesh | 100000 | 20 |
| 103 | anaaya | 100000 | 20 |
| 104 | ranbir | 100000 | 20 |
| 105 | kajal | 100000 | 20 |
| 106 | ohani | 100000 | 20 |
| NULL | NULL | NULL | NULL |

**Conclusion:-** Hence we have successfully learned introduction to DDL and create a basic table.