

<b>Name</b>	Adwait S Purao
<b>UID no.</b>	2021300101
<b>Experiment No.</b>	2

<b>AIM:</b>	DDL Commands Database Creation
<b>Program 1</b>	
<b>PROBLEM STATEMENT :</b>	. Create a Table and show the relationship between two tables using a foreign key.
<b>Theory :</b>	<p><b>What is Data Definition Language (DDL)?</b></p> <p>Data Definition Language (DDL) is used to create and modify the structure of objects in a database using predefined commands and a specific syntax. These database objects include tables, sequences, locations, aliases, schemas and indexes.</p> <p>DDL is an abbreviation of <b>Data Definition Language</b>.</p> <p>The DDL Commands in Structured Query Language are used to create and modify the schema of the database and its objects. The syntax of DDL commands is predefined for describing the data. The commands of Data Definition Language deal with how the data should exist in the database. Following is the five DDL commands in SQL:</p> <ul style="list-style-type: none"> <li>• <b>CREATE</b> Command</li> <li>• <b>DROP</b> Command</li> <li>• <b>ALTER</b> Command</li> <li>• <b>TRUNCATE</b> Command</li> <li>• <b>RENAME</b> Command</li> </ul> <p><b>CREATE Command</b></p> <p>CREATE is a DDL command used to create databases, tables, triggers, and other database objects.</p> <p>Syntax to Create a Database: CREATE Database Database_Name; Syntax to create a new table:</p> <p>CREATE TABLE table_name (</p>

	<pre>column_Name1 data_type ( size of the column ) , column_Name2 data_type ( size of the column) , column_Name3 data_type ( size of the column) , ... column_NameN data_type ( size of the column ) );</pre>
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

### **DROP Command**

DROP is a DDL command used to delete/remove the database objects from the SQL database. This DDL command can easily remove the entire table, view, or index from the database.

Syntax to remove a database: DROP DATABASE

Database\_Name; Syntax to remove a table: DROP TABLE  
Table\_Name;

### **ALTER Command**

ALTER is a DDL command which changes or modifies the existing structure of the database, and it also changes the schema of database objects. We can also add and drop constraints of the table using the ALTER command Syntax to add a new field in the table:

ALTER TABLE name\_of\_table ADD column\_name  
column\_definition;

### **TRUNCATE Command**

TRUNCATE is another DDL command which deletes or removes all the records from the table.

Syntax of TRUNCATE command TRUNCATE TABLE  
Table\_Name;

<b>Queries</b>	<pre> CREATE DATABASE Hotel; use Hotel  CREATE TABLE Hotel ( H_Name Varchar(120) Not Null, H_ID int Primary key, H_Address Varchar(200) Not Null, H_Num_Emp int, H_vacancies int );  CREATE TABLE Employee ( E_Name Varchar(70), E_Type Varchar(50), E_ID int primary key, H_ID int, foreign key(H_ID) references Hotel(H_ID), LastName varchar(255), FirstName varchar(255), Address varchar(255), City varchar(255), E_Contact int, E_Salary int not null check(E_salary&gt;0) ); create table Room( R_no int primary key, R_vacany boolean default true, R_price int not null, R_type varchar(30), </pre>

```

H_ID int references Hotel(H_ID)

);

create table Reservation(
Reservation_no int primary key,
R_intime datetime not null,
R_outtime datetime,
Amount int not null check(Amount>0),
R_no int references Room(R_no),
C_ID int references Customer(C_ID)

);
CREATE TABLE Customer(
C_Id int primary key,
C_Name Varchar(50) Not Null,
Reservation_no int,
C_Age int ,
C_Address Varchar(70) Not Null,
C_contact int,
C_cin_time int,
C_cout_t int,
foreign key(Reservation_no) references Reservation(Reservation_no)
);

alter table hotel rename hotel_info;

insert into hotel_info values("marriot",1234,"Pune",3456,5);
insert into hotel_info values("The Plaza",2345,"New York ",4567,7);
insert into hotel_info values("Claridge's",3456,"London",5678,7);
insert into hotel_info values("Raffles",5678,"Singapore",6789,8);
insert into hotel_info values("Taj Mahal Palace",6789,"Mumbai ",7890 ,9);
insert into hotel_info values("Beverly Hills Hotel",8970,"Los
Angeles",8907,2);

insert into employee values("Adwait
Purao","Permanent",1,1234,"Purao","Adwait","Kurla","Mumbai",73046717
44,10000);

insert into employee values("Ram

```

Kumar", "Permanent", 2, 1234, "Kumar", "Ram", "Kalina", "Mumbai", 12346, 20000);

insert into employee values("Akshay Kumar", "Temporary", 3, 3456, "Kumar", "Akshay", "Ram chowk", "Ramgad", 12347, 30000);

insert into employee values("Ranbir Kapoor", "Permanent", 4, 2345, "Kapoor", "Ranbir", "Roopnagar", "Agra", 12348, 40000);

insert into employee values("Angelina Jolie", "Permanent", 5, 8970, "Jolie", "Angelina", "Beverly Hills", "Los Angeles", 12349, 50000);

alter table customer modify C\_cin\_time time ;  
alter table customer modify C\_cout\_t time ;  
alter table reservation modify R\_intime time ;  
alter table reservation modify R\_outtime time ;

insert into reservation values(1, "12:56:23", "16:56:23", 1000, 12, 1234);  
insert into reservation values(2, "13:54:43", "19:26:13", 2000, 13, 1235);  
insert into reservation values(3, "11:24:41", "20:55:53", 1500, 14, 1236);  
insert into reservation values(4, "22:21:45", "16:25:33", 2500, 15, 1237);

insert into customer values(1234, "Sam Vaz", 1, 34, "Ghatkopar", 123456, "12:56:23", "16:56:23");

insert into customer values(1235, "Ram Sharma", 2, 44, "Ghansoli", 123457, "13:54:43", "19:26:13");

insert into customer values(1236, "Sachin Tendulkar", 3, 50, "Colaba", 123458, "11:24:41", "20:55:53");

insert into customer values(1237, "Virat Kohli", 4, 30, "Dadar", 123459, "22:21:45", "16:25:33");

insert into room values(12, 1, 1000, "Basic", 1234);  
insert into room values(13, 0, 2000, "Deluxe", 2345);  
insert into room values(14, 1, 1500, "Suite", 5678);

insert into room values(15,0,2500," Luxury Suite",6789);

select \* from hotel\_info;

select \* from employee;

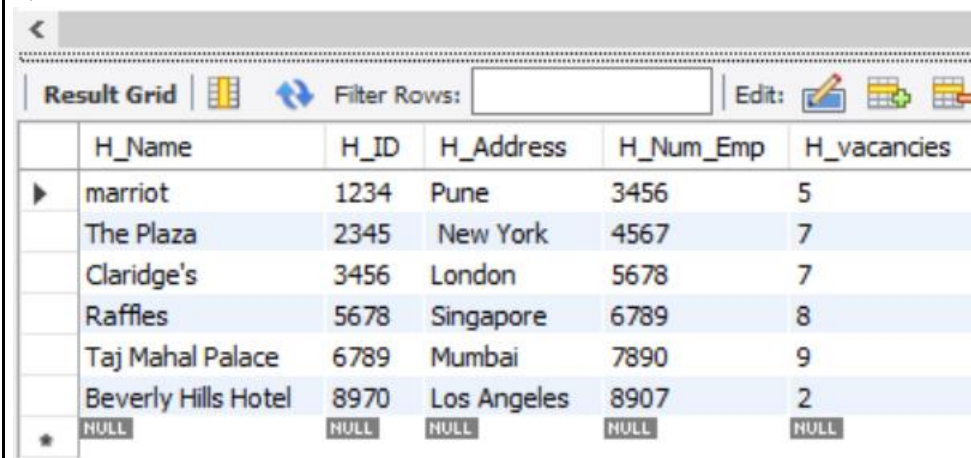
select \* from room;

select \* from reservation;

select \* from customer;

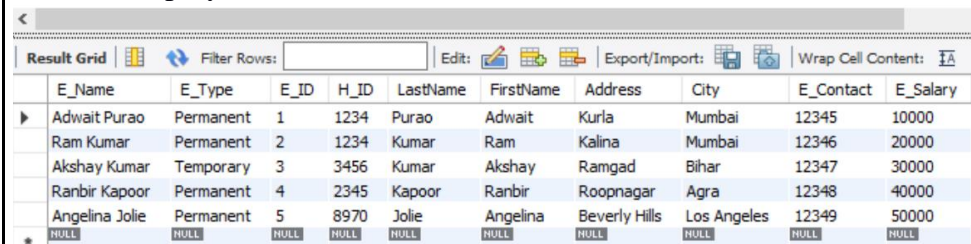
Output:

1)Table hotel\_info



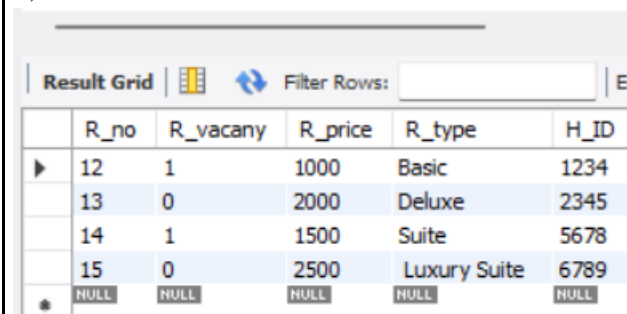
	H_Name	H_ID	H_Address	H_Num_Emp	H_vacancies
▶	marriot	1234	Pune	3456	5
	The Plaza	2345	New York	4567	7
	Claridge's	3456	London	5678	7
	Raffles	5678	Singapore	6789	8
	Taj Mahal Palace	6789	Mumbai	7890	9
	Beverly Hills Hotel	8970	Los Angeles	8907	2
★	NULL	NULL	NULL	NULL	NULL

2)Table Employee



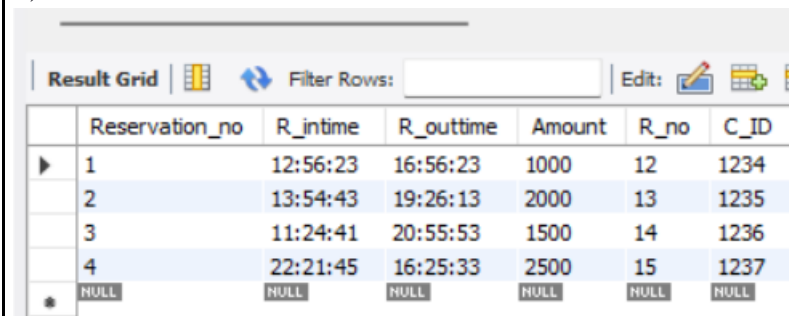
	E_Name	E_Type	E_ID	H_ID	LastName	FirstName	Address	City	E_Contact	E_Salary
▶	Adwait Purao	Permanent	1	1234	Purao	Adwait	Kurla	Mumbai	12345	10000
	Ram Kumar	Permanent	2	1234	Kumar	Ram	Kalina	Mumbai	12346	20000
	Akshay Kumar	Temporary	3	3456	Kumar	Akshay	Ramgad	Bihar	12347	30000
	Ranbir Kapoor	Permanent	4	2345	Kapoor	Ranbir	Roopnagar	Agra	12348	40000
	Angelina Jolie	Permanent	5	8970	Jolie	Angelina	Beverly Hills	Los Angeles	12349	50000
★	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

3)Table Room



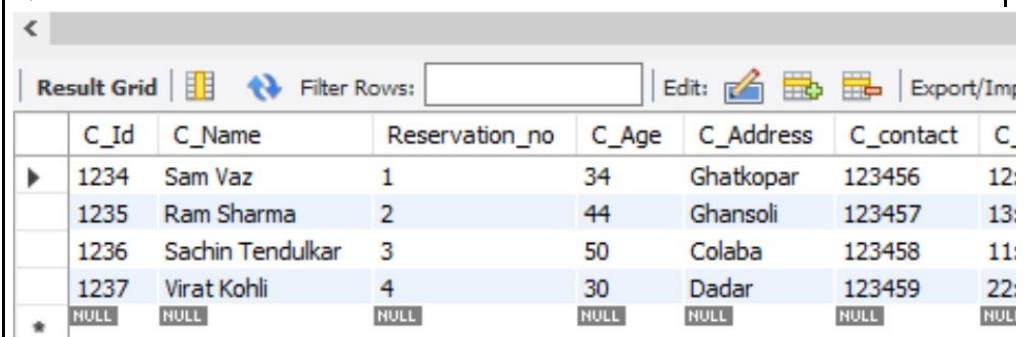
	R_no	R_vacany	R_price	R_type	H_ID
▶	12	1	1000	Basic	1234
	13	0	2000	Deluxe	2345
	14	1	1500	Suite	5678
	15	0	2500	Luxury Suite	6789
★	NULL	NULL	NULL	NULL	NULL

#### 4)Table Reservation



	Reservation_no	R_intime	R_outtime	Amount	R_no	C_ID
▶	1	12:56:23	16:56:23	1000	12	1234
	2	13:54:43	19:26:13	2000	13	1235
	3	11:24:41	20:55:53	1500	14	1236
	4	22:21:45	16:25:33	2500	15	1237
*	NULL	NULL	NULL	NULL	NULL	NULL

#### 5)Table Customer



	C_Id	C_Name	Reservation_no	C_Age	C_Address	C_contact	C_
▶	1234	Sam Vaz	1	34	Ghatkopar	123456	12:
	1235	Ram Sharma	2	44	Ghansoli	123457	13:
	1236	Sachin Tendulkar	3	50	Colaba	123458	11:
	1237	Virat Kohli	4	30	Dadar	123459	22:
*	NULL	NULL	NULL	NULL	NULL	NULL	NUL

### Conclusion

In this experiment, I learned to create tables on mySQL software . we could create table using CREATE keyword and we could insert rows using INSERT keyword. We also learned about foreign key and primary key. We also learnt about keywords like not null , default and check .I also learned about different types of data types and used them in my code.