

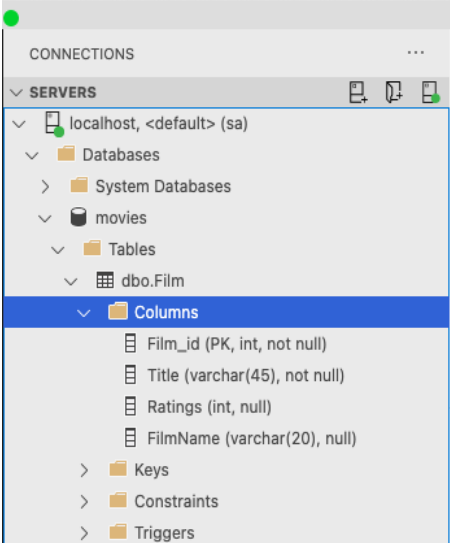
DBMS LAB ASSIGNMENT-1

Name : G.Mohith Krishna

Roll No. : 19BCS043

1) Add, Modify and Delete Column using Alter Command

ADD :



SQLQuery_1 - localhost.movies (sa)

CONNECTIONS

SERVERS

localhost, <default> (sa)

Databases

System Databases

movies

Tables

dbo.Film

Columns

- Film_id (PK, int, not null)
- Title (varchar(45), not null)
- Ratings (int, null)
- FilmName (varchar(20), null)

Keys

Constraints

Triggers

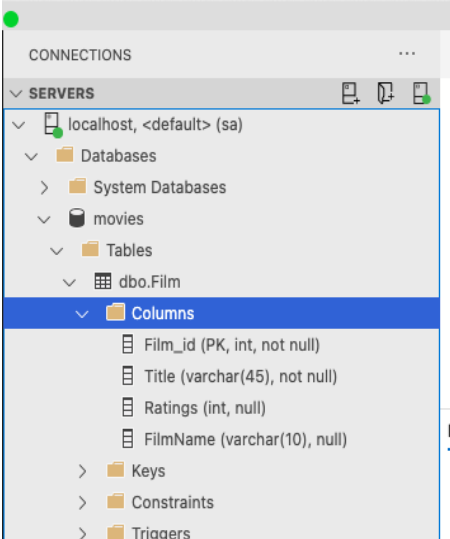
Run Cancel Disconnect Change Connection movies

```
1 ALTER TABLE Film
2 ADD FilmName varchar(20);
```

Messages

17:35:54 Started executing query at Line 1
Commands completed successfully.
Total execution time: 00:00:00.015

MODIFY :



SQLQuery_1 - localhost.movies (sa)

CONNECTIONS

SERVERS

localhost, <default> (sa)

Databases

System Databases

movies

Tables

dbo.Film

Columns

- Film_id (PK, int, not null)
- Title (varchar(45), not null)
- Ratings (int, null)
- FilmName (varchar(10), null)

Keys

Constraints

Triggers

Run Cancel Disconnect Change Connection movies

```
1 ALTER TABLE Film
2 ALTER COLUMN FilmName varchar(10);
```

Messages

17:36:40 Started executing query at Line 1
Commands completed successfully.
Total execution time: 00:00:00.022

DELETE :

The screenshot displays the SQL Server Enterprise Manager interface. On the left, the 'CONNECTIONS' pane shows the server hierarchy: 'localhost, <default> (sa)' > 'Databases' > 'movies' > 'Tables' > 'dbo.Film'. The 'Columns' folder under 'dbo.Film' is expanded, showing 'Film_id (PK, int, not null)', 'Title (varchar(45), not null)', and 'Ratings (int, null)'. The main query window, titled 'SQLQuery_1 - localhost.movies (sa)', contains the following SQL commands:

```
1 ALTER TABLE Film
2 DROP COLUMN FilmName;
```

Below the query window, the 'Messages' pane shows the execution results:

17:34:24 Started executing query at Line 1
Commands completed successfully.
Total execution time: 00:00:00.023

2) Insert 20 employees Data into all the tables

The screenshot displays the SQL Server Enterprise Manager interface on the left and the SQL Query Editor on the right. The Enterprise Manager shows the 'Movie_Details' database selected, with the 'Tables' folder expanded, listing 'dbo.Film' and 'dbo.Inventory'. The Query Editor shows a SQL script with 41 lines of code. Lines 1 through 40 are 'INSERT INTO' statements for the 'Inventory' table, each followed by a 'VALUES' clause containing an 'Inventory_id' and an 'Inventory_name'. The names are: Mohith, Rocky, Rosie, Riyan, Aryan, Manvi, Steve, Elena, Demon, Vidhi, Vansh, Bhavya, Ridhima, Ponky, Munny, Krishna, Apoorva, Lipsika, Vanshika, and Kidnesh. Line 41 is a 'SELECT TOP(50) * FROM Inventory;' statement. The top toolbar of the Query Editor shows 'Run', 'Cancel', 'Disconnect', and 'Change Connection' buttons. A dropdown menu at the top right of the Query Editor shows 'Movie_Details'.

```
1  INSERT INTO Inventory(Inventory_id,Inventory_name)
2  VALUES(1,'Mohith');
3  INSERT INTO Inventory(Inventory_id,Inventory_name)
4  VALUES(2,'Rocky');
5  INSERT INTO Inventory(Inventory_id,Inventory_name)
6  VALUES(3,'Rosie');
7  INSERT INTO Inventory(Inventory_id,Inventory_name)
8  VALUES(4,'Riyan');
9  INSERT INTO Inventory(Inventory_id,Inventory_name)
10 VALUES(5,'Aryan');
11 INSERT INTO Inventory(Inventory_id,Inventory_name)
12 VALUES(6,'Manvi');
13 INSERT INTO Inventory(Inventory_id,Inventory_name)
14 VALUES(7,'Steve');
15 INSERT INTO Inventory(Inventory_id,Inventory_name)
16 VALUES(8,'Elena');
17 INSERT INTO Inventory(Inventory_id,Inventory_name)
18 VALUES(9,'Demon');
19 INSERT INTO Inventory(Inventory_id,Inventory_name)
20 VALUES(10,'Vidhi');
21 INSERT INTO Inventory(Inventory_id,Inventory_name)
22 VALUES(11,'Vansh');
23 INSERT INTO Inventory(Inventory_id,Inventory_name)
24 VALUES(12,'Bhavya');
25 INSERT INTO Inventory(Inventory_id,Inventory_name)
26 VALUES(13,'Ridhima');
27 INSERT INTO Inventory(Inventory_id,Inventory_name)
28 VALUES(14,'Ponky');
29 INSERT INTO Inventory(Inventory_id,Inventory_name)
30 VALUES(15,'Munny');
31 INSERT INTO Inventory(Inventory_id,Inventory_name)
32 VALUES(16,'Krishna');
33 INSERT INTO Inventory(Inventory_id,Inventory_name)
34 VALUES(17,'Apoorva');
35 INSERT INTO Inventory(Inventory_id,Inventory_name)
36 VALUES(18,'Lipsika');
37 INSERT INTO Inventory(Inventory_id,Inventory_name)
38 VALUES(19,'Vanshika');
39 INSERT INTO Inventory(Inventory_id,Inventory_name)
40 VALUES(20,'Kidnesh');
41 SELECT TOP(50) * FROM Inventory;
```

SERVERS

- localhost, <default> (sa)
 - Databases
 - System Databases
 - movies
 - Tables
 - dbo.Film
 - dbo.Inventory
 - Views
 - Synonyms
 - Programmability
 - External Resources
 - Service Broker
 - Storage
 - Security
 - Security
 - Server Objects

Run Cancel Disconnect Change Connection

Results Messages

	Inventory_id	Inventory_name
1	1	Mohith
2	2	Rocky
3	3	Rosie
4	4	Riyan
5	5	Aryan
6	6	Manvi
7	7	Steve
8	8	Elena
9	9	Demon
10	10	Vidhi
11	11	Vansh
12	12	Bhavya
13	13	Ridhima
14	14	Ponky
15	15	Munny
16	16	Krishna
17	17	Apoorva
18	18	Lipsika
19	19	Vanshika
20	20	Kidnesh

3) Show Violation of Primary Key, Unique, Not Null and default key constraints through insertion.

PRIMARY KEY :

Run Cancel Disconnect Change Connection Movie_Details

```

1 INSERT INTO Inventory (Inventory_id, Inventory_name)
2 VALUES (1, 'Mohith');

```

Messages

14:19:15 Started executing query at Line 1
 Msg 2627, Level 14, State 1, Line 1
 Violation of PRIMARY KEY constraint 'PK__Inventor__2B66F80378E431A0'. Cannot insert duplicate key in object 'dbo.Inventory'. The duplicate key value is (1).
 The statement has been terminated.
 Total execution time: 00:00:00.015

NOT NULL:

Run Cancel | Disconnect Change Connection Movie_Details

```
1 INSERT INTO Inventory(Inventory_id,Inventory_name)
2 VALUES(NULL,'Mohith');
```

Messages

14:21:38 Started executing query at Line 1
Msg 515, Level 16, State 2, Line 1
Cannot insert the value NULL into column 'Inventory_id', table 'Movie_Details.dbo.Inventory'; column does not allow nulls. INSERT fails.
The statement has been terminated.
Total execution time: 00:00:00.007

DEFAULT ERROR :

Run Cancel | Disconnect Change Connection Movie_Details

```
1 ALTER TABLE Inventory
2 ADD CONSTRAINT df_Inventory_id
3 DEFAULT '10' FOR Inventory_id
4 INSERT INTO Inventory(Inventory_id,Inventory_name)
5 VALUES(21,'Mohith');
```

Messages

14:42:28 Started executing query at Line 1
Msg 1781, Level 16, State 1, Line 1
Column already has a DEFAULT bound to it.
Msg 1750, Level 16, State 0, Line 1
Could not create constraint or index. See previous errors.
Total execution time: 00:00:00.010

4) Insert tuples into the table and see how foreign key constraint works if you try to insert into dependent table first.

```
Run Cancel | Disconnect Change Connection Movie_Details
1 INSERT INTO Film_actor
2 VALUES(1,3,12)
```

Messages

16:47:36 Started executing query at Line 1
Msg 547, Level 16, State 0, Line 1
The INSERT statement conflicted with the FOREIGN KEY constraint "FK_Film_acto_Film___5070F446". The conflict occurred in database "Movie_Details", table "dbo.Film", column 'Film_id'.
The statement has been terminated.
Total execution time: 00:00:00.010

5) Show Violation of Foreign Key Constraint when you try to delete from a base table. If you get an error explain why deletion gives an error

```
DELETE FROM T3_CustomerDetails WHERE
customer_id = 1050;
```

100 %

Messages

Msg 547, Level 16, State 0, Line 117
The DELETE statement conflicted with the REFERENCE constraint "FK_T3_BookingDetails_T3_CustomerDetails". The conflict occurred in database "T3_Travel", table "dbo.T3_BookingDetails".
The statement has been terminated.

Completion time: 2021-02-18T20:23:12.8435276+05:30

The deletion is giving an error as it violates referential integrity constraint. First, we need to delete the corresponding tuple from the dependent table and then the base table.

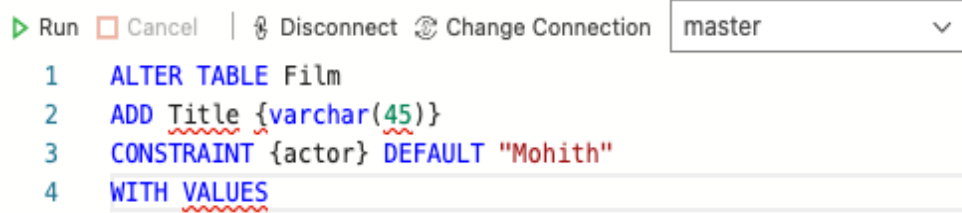
6) Try to update a non-existing entity data and check for error

```
Run Cancel | Disconnect Change Connection Movie_Details
1 UPDATE Film_actor
2 SET Actor_name='Mohith'
3 WHERE Film_id=12
```

Messages

17:07:15 Started executing query at Line 1
(0 rows affected)
Total execution time: 00:00:00.007

7) Add a column which has default value.



The screenshot shows a SQL query editor with a toolbar at the top containing buttons for 'Run' (green play icon), 'Cancel' (red square icon), 'Disconnect' (network icon), and 'Change Connection' (circular arrow icon). To the right of these buttons is a dropdown menu showing 'master'. Below the toolbar, the query is written in a monospaced font with syntax highlighting: line 1 is 'ALTER TABLE Film', line 2 is 'ADD Title {varchar(45)}', line 3 is 'CONSTRAINT {actor} DEFAULT "Mohith"', and line 4 is 'WITH VALUES'. The words 'Title', 'actor', and 'VALUES' are underlined with red wavy lines.

```
1 ALTER TABLE Film
2 ADD Title {varchar(45)}
3 CONSTRAINT {actor} DEFAULT "Mohith"
4 WITH VALUES
```

8) 5 Simple Select queries to retrieve data from your database.

9) Show how Foreign key constraint effects Updating a dependent table when value is not existing and in Base table where the value is referred and you want to update it.