DBMS LAB ASSIGNMENT-3

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1. Add, Modify and Delete Column using Alter Command

ADD:

```
File Edit View Project Tools Window Help
🌼 - 🌣 🏗 - 😩 🖴 🎥 New Query 🕮 ଲେଲ ଲେଲ 🐰 🗗 ର 💆 - ୯ - 🔞 🕒 🏓
                                                                              - a > = = -
Object Explorer
                                          □use Movie Details;
Connect * * ■ ▼ * *
                                          -Alter table Film
 ■ ■ Database Snapshots
                                            Add FilmName varchar(20);
 ■ Movie_Details
                                          ⊑Alter table Film
   ⊞ ■ Database Diagrams
                                            Alter column FilmName varchar(20);
   ■ ■ Tables
                                          ⊟Alter table Film

    ■ System Tables

                                           Drop column FilmName;

    ■ FileTables

    ■ External Tables

■ ■ Graph Tables
       ■ Columns
         Film_id (PK, int, not null)
          ☐ Title (varchar(45), not null)
         ■ Ratings (int, null)
         FilmName (varchar(20), null
                                         Completion time: 2021-02-19T15:22:24.5559910+05:30
       🛚 🖷 Keys

■ ■ Constraints

       🛚 🖷 Triggers
       ■ Indexes

■ ■ dbo.Film_actor
```

MODIFY:

```
♥♥ Movie_Details · Details · Detai
Object Explorer
                                                                                                                                                                  □use Movie_Details;
Connect + + + - + C +
                                                                                                                                                                  ⊟Alter table Film
    ■ ■ Database Snapshots
                                                                                                                                                                         Add FilmName varchar(20);
     ■ Movie_Details
                                                                                                                                                                  Alter table Film
            ⊞ ■ Database Diagrams
                                                                                                                                                                         Alter column FilmName varchar(10);
            ■ ■ Tables
                                                                                                                                                                  ⊟Alter table Film

■ ■ System Tables
                                                                                                                                                                      Drop column FilmName;

    ■ ■ FileTables

                   ■ ■ External Tables

■ ■ Graph Tables

                   □ Ⅲ dbo.Film
                         □ ■ Columns
                                   → Film_id (PK, int, not null)
                                                                                                                                                 194 % ▼ ◀
                                      ☐ Title (varchar(45), not null)
                                                                                                                                                               Commands completed successfully.
                                      ■ Ratings (int, null)
                                     FilmName (varchar(10), null
                                                                                                                                                              Completion time: 2021-02-19T15:24:34.2854050+05:30
                         🛚 🖷 Keys

■ ■ Constraints

■ ■ Triggers
                          ■ Indexes
```

DELETE:

```
SQLQuery2....SRI (52))* * ×

<u>□use</u> Movie_Details;

Connect + + + - - C +
                                           ⊟Alter table Film

■ ■ Database Snapshots

                                             Add FilmName varchar(20);
 ■ Movie_Details
                                           ⊟Alter table Film

■ ■ Database Diagrams

                                             Alter column FilmName varchar(10);

■ ■ Tables

                                            Alter table Film

■ ■ System Tables

                                             Drop column FilmName;

■ FileTables

    ■ External Tables

■ ■ Graph Tables
     ■ ■ dbo.Film

■ ■ Columns

          Film_id (PK, int, not null)
                                       194 % 🕶 🖣
          ☐ Title (varchar(45), not null)
                                           Commands completed successfully.
          ■ Ratings (int, null)
          ☐ FilmName (varchar(10), null)
                                           Completion time: 2021-02-19T15:25:41.3655538+05:30

■ ■ Keys

■ ■ Constraints

      🛚 🖷 Triggers
      ■ Indexes

■ ■ Statistics
```

2.) Insert 20 employees Data into all the tables.

SQLQuery2....SRI (52))* * ×

```
dinsert into Inventory(Inventory_id,Inventory_name)
 values(2, 'Rocky');
finsert into Inventory(Inventory_id,Inventory_name)
 values(3,'Rosie');
finsert into Inventory(Inventory_id,Inventory_name)
 values(4, 'Riyan');
insert into Inventory(Inventory_id,Inventory_name)
 values(5,'Aryan');
insert into Inventory(Inventory_id,Inventory_name)
 values(6,'Manvi');
dinsert into Inventory(Inventory_id,Inventory_name)
 values(7, 'Steve');
insert into Inventory(Inventory_id,Inventory_name)
 values(8, 'Elena');
finsert into Inventory(Inventory_id,Inventory_name)
 values(9,'Demon');
insert into Inventory(Inventory_id,Inventory_name)
 values(10,'Vidhi');
insert into Inventory(Inventory_id,Inventory_name)
 values(11, 'Vansh');
finsert into Inventory(Inventory_id,Inventory_name)
 values(12, 'Bhavya');
insert into Inventory(Inventory_id,Inventory_name)
 values(13, 'Ridhima');
insert into Inventory(Inventory_id,Inventory_name)
 values(14, 'Ponky');

_insert into Inventory(Inventory_id,Inventory_name)
 values(15,'Munny');
insert into Inventory(Inventory_id,Inventory_name)
 values(16, 'Koneru');
dinsert into Inventory(Inventory_id,Inventory_name)
 values(17, 'Apoorva');
insert into Inventory(Inventory_id,Inventory_name)
 values(18,'Lipsika');
finsert into Inventory(Inventory_id,Inventory_name)
 values(19,'Vanshika');
insert into Inventory(Inventory_id,Inventory_name)
 values(20, 'Kidnesh');
 select * from Inventory;
```

85 % • • Messages

	Inventory_id	Inventory_name
1	1	Reha
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	Koneru
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

```
insert into Inventory(Inventory_id,Inventory_name)

values(1,'Reha');

leads of the session of PRIMARY KEY constraint 'PK_Inventor_2B66F8034692F585'. Cannot insert duplicate key in object 'dbo.Inventory'. The duplicate key value is (4 The statement has been terminated.

MSC 2627. Level 14. State 1. Line 10
```

NOT NULL:

```
SQLQuery2...SRI (52))* * ×

insert into Inventory(Inventory_id,Inventory_name)

values(20,'Kidnesh');

select * from Inventory;

insert into Inventory(Inventory_id,Inventory_name)

values( NULL, 'Reha');

Results M Messages

(20 rows affected)

Msg 515, Level 16, State 2, Line 45

Cannot insert the value NULL into column 'Inventory_id', table 'Movie_Details.dbo.In

The statement has been terminated.

Completion time: 2021-02-19T15:56:54.9964357+05:30
```

DEFAULT ERROR

```
SQLQuery2....SRI (52))* * ×

use Movie_Details;
alter table Inventory
add constraint df_Inventory_id
default '10' for Inventory_id
insert into Inventory(Inventory_id,Inventory_name)
values(21, reha');

Msg 1781, Level 16, State 1, Line 2
Column already has a DEFAULT bound to it.
Msg 1750, Level 16, State 0, Line 2
Could not create constraint or index. See previous errors.

Completion time: 2021-02-19T16:12:03.6992878+05:30
```

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

```
SQLQuery2...SRI (52))* * ×

Suse Movie_Details;
Sinsert into Film_actor

values(1,null,12);

Messages

Mag 547, Level 16, State 0, Line 2
The INSERT statement conflicted with the FOREIGN KEY constraint "FK_Film_acto_Film_267ABA7A". The conflict occurred in The statement has been terminated.

Completion time: 2021-02-19T16:27:13.7226343+05:30
```

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

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

```
SQLQuery2....SRI (52))* ** ×

| use Movie_Details;
| update film_actor
| set actor_name = 'Koneru'
| where Film_id=12
```

7. Add a column which has default value.

```
SQLQuery2....SRI (52))* * ×

□ use Movie_Details;
□ ALTER TABLE Film
□ ADD Title {varchar(45)}

CONSTRAINT {actor} DEFAULT "reha"

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.