DBMS LAB ASSIGNMENT - 3
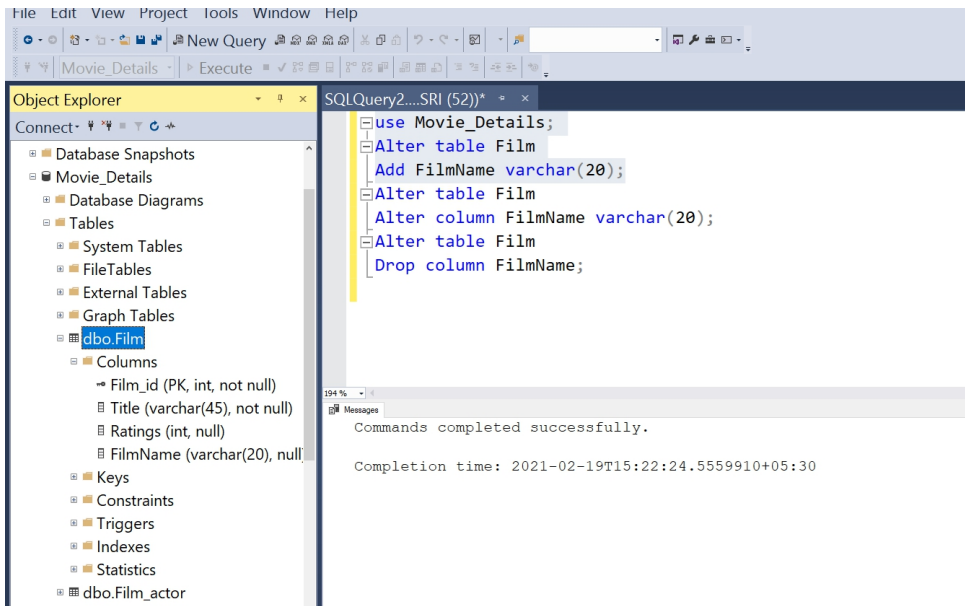
Name: R. Dhatri Kiran

Roll No. : 19BCS093

1.Add, Modify and Delete Column using Alter Command
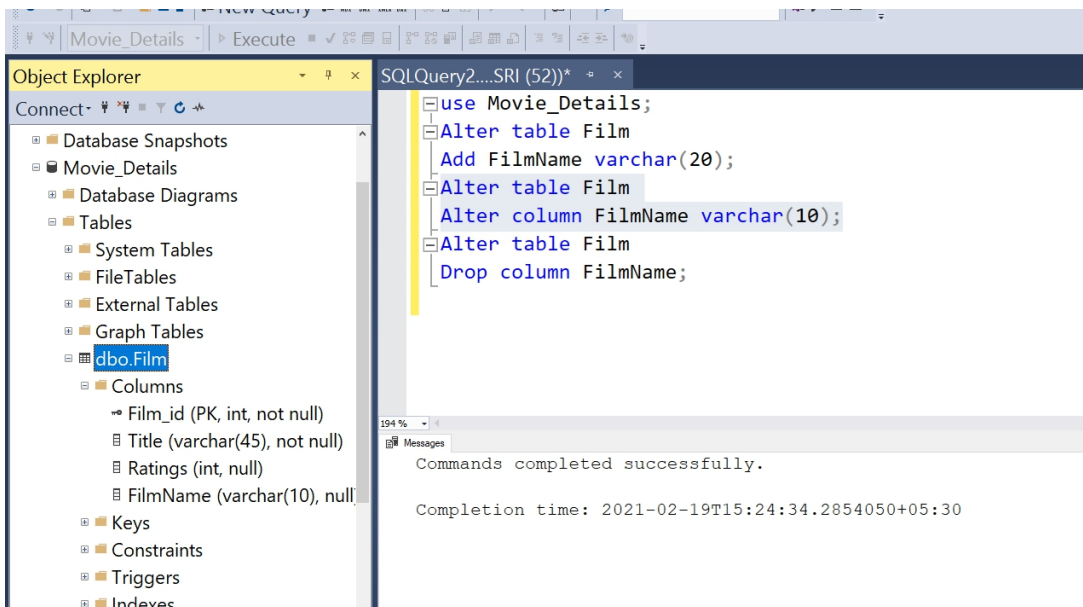
ADD:

MODIFY:

DELETE:


```
use Movie_Details;
Alter table Film
Add FilmName varchar(20);
Alter table Film
Alter column FilmName varchar(10);
Alter table Film
Drop column FilmName;
```

Commands completed successfully.

Completion time: 2021-02-19T15:25:41.3655538+05:30

Object Explorer showing:
- Database Snapshots
- Movie_Details
  - Database Diagrams
  - Tables
    - System Tables
    - FileTables
    - External Tables
    - Graph 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
      - Indexes
      - Statistics

2. Insert 20 employees Data into all the tables.


```
insert into Inventory(Inventory_id,Inventory_name)
values(2,'Rocky');
insert into Inventory(Inventory_id,Inventory_name)
values(3,'Rosie');
insert 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');
insert into Inventory(Inventory_id,Inventory_name)
values(7,'Steve');
insert into Inventory(Inventory_id,Inventory_name)
values(8,'Elena');
insert 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');
insert 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');
insert into Inventory(Inventory_id,Inventory_name)
values(17,'Apoorva');
insert into Inventory(Inventory_id,Inventory_name)
values(18,'Lipsika');
insert into Inventory(Inventory_id,Inventory_name)
values(19,'Vanshika');
insert into Inventory(Inventory_id,Inventory_name)
values(20,'Kidnesh');

select * from Inventory;
```

⊞ Results 📄 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

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');
```

5 % ▾ ◀
▦ Results 📄 Messages

Msg 2627, Level 14, State 1, Line 8
Violation 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.
Msg 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');
```

165 %   ◄
Results 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');
```

165 %   ◄
Messages

```
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))* * ×
use Movie_Details;
insert into Film_actor

  values(1,null,12);
```

```
Messages
Msg 547, Level 16, State 0, Line 2
The INSERT statement conflicted with the FOREIGN KEY constraint "FK__Film_acto__Film___267ABA7A". The conflict occurred i
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

```
SQLQuery2....SRI (52))* * ×
use Movie_Details;
delete from Film_actor WHERE
  Film_id=12
```

```
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: 2021-02-18T20:23:12.8436276+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

```
SQLQuery2....SRI (52))* * ×
use Movie_Details;
update film_actor
  set actor_name ='Koneru'
  where Film_id=12
```

```
100 % -
Messages
(0 rows affected)

Completion time: 2021-02-18T20:27:21.7988264+05:30
```

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.