DBMS LAB ASSIGNMENT – 3

K.GunaSekhar

19BCS046

1. Add, Modify and Delete Column using Alter Command

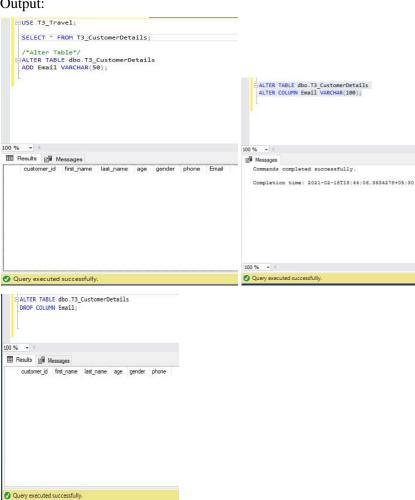
/*Alter Table*/ ALTER TABLE dbo.T3 CustomerDetails ADD Email VARCHAR(50); ALTER TABLE dbo.T3_CustomerDetails

ALTER TABLE dbo.T3_CustomerDetails

ALTER COLUMN Email VARCHAR(100);

DROP COLUMN Email;

Output:



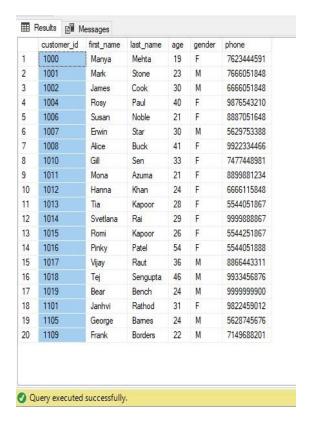
2. Insert 20 Employees Data into all the tables. Use all the 3 methods that I have showcased.

```
/*INSERTING 1.insert into parameters and values 2.insert into all the values directly 3.insert into using select*/
□INSERT INTO dbo.T3 CustomerDetails(customer id, first name, last name, age, gender, phone)
 VALUES(1001, 'Mark', 'Stone', 23, 'M', '7666051848');
☐ INSERT INTO dbo.T3 CustomerDetails
 VALUES(1101, 'Janhvi', 'Rathod', 31, 'F', '9822459012');
INSERT INTO dbo.T3_CustomerDetails(customer_id, first_name, last_name, age, gender, phone)
 (SELECT customer_id, first_name, last_name, age, gender, phone FROM TRAVEL.dbo.CustomerDetails where customer_id = 1000);
☐INSERT INTO dbo.T3 CustomerDetails(customer id, first name, last name, age, gender, phone)
 VALUES(1004, 'Rosy', 'Paul', 40, 'F', '9876543210');
☐ INSERT INTO dbo.T3 CustomerDetails
 VALUES(1105, 'George', 'Barnes', 24, 'M', '5628745676');
☐INSERT INTO dbo.T3 CustomerDetails(customer_id, first_name, last_name, age, gender, phone)
 VALUES(1006, 'Susan', 'Noble', 21, 'F', '8887051648');
□INSERT INTO dbo.T3_CustomerDetails
 VALUES(1007, 'Erwin', 'Star', 30, 'M', '5629753388');
□INSERT INTO dbo.T3_CustomerDetails(customer_id, first_name, last_name, age, gender, phone)
 VALUES(1008, 'Alice', 'Buck', 41, 'F', '9922334466');
□INSERT INTO dbo.T3 CustomerDetails
 VALUES(1109, 'Frank', 'Borders', 22, 'M', '7149688201');

⊡INSERT INTO dbo.T3 CustomerDetails(customer id, first name, last name, age, gender, phone)

 VALUES(1010, 'Gill', 'Sen', 33, 'F', '7477448981');
□ INSERT INTO dbo.T3 CustomerDetails
  VALUES(1012, 'Hanna', 'Khan', 24, 'F', '6666115848');
 INSERT INTO dbo.T3_CustomerDetails(customer_id, first_name, last_name, age, gender, phone)
  VALUES(1011, 'Mona', 'Azuma', 21, 'F', '8899881234');
☐INSERT INTO dbo.T3_CustomerDetails
  VALUES(1013, 'Tia', 'Kapoor', 28, 'F', '5544051867');
□ INSERT INTO dbo.T3 CustomerDetails
  VALUES(1014, 'Svetlana', 'Rai', 29, 'F', '9999888867');
 ☐ INSERT INTO dbo.T3_CustomerDetails
  VALUES(1015, 'Romi', 'Kapoor', 26, 'F', '5544251867');
INSERT INTO dbo.T3_CustomerDetails
  VALUES(1016, 'Pinky', 'Patel', 54, 'F', '5544051888');
 ☐ INSERT INTO dbo.T3 CustomerDetails
 VALUES(1017,'Vijay','Raut', 36, 'M', '8866443311');
□ INSERT INTO dbo.T3_CustomerDetails
  VALUES(1018, 'Tej', 'Sengupta', 46, 'M', '9933456876');
 INSERT INTO dbo.T3_CustomerDetails
  VALUES(1019, 'Bear', 'Bench', 24, 'M', '9999999900');
```

Output:



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

```
/*Violation of Unique constraint*/
     INSERT INTO dbo.T3_CustomerDetails(customer_id, first_name, last_name, age, gender, phone)
      VALUES(1030, 'Robin', 'Steel', 23, 'M', '7666054443');
 100 % + 4
  Messages
    Msg 2627, Level 14, State 1, Line 94
    Violation of UNIQUE KEY constraint 'UQ_T3_Custo_OF587AE6EAA08238'. Cannot insert duplicate key in object 'dbo.T3_CustomerDetails'. The duplicate key value is (Robin).
    The statement has been terminated.
    Completion time: 2021-02-18T19:59:16.3996926+05:30
     /*Violation of Not Null constraint*/
    □INSERT INTO dbo.T3_CustomerDetails(customer_id, first_name, last_name, age, gender, phone)

VALUES(1211, 'Robin', 'Stone', 23, 'M', NULL);
100 % - 4
 Messages
   Msg 515, Level 16, State 2, Line 86
Cannot insert the value NULL into column 'phone', table 'T3_Travel.dbo.T3_CustomerDetails'; column does not allow nulls. INSERT fails.
   The statement has been terminated.
   Completion time: 2021-02-18T19:50:20.7705802+05:30
    ALTER TABLE dbo.T3 CustomerDetails
      ADD CONSTRAINT df_age
     DEFAULT '20' FOR age;
      /*Violation of default constraint*/
    ☐ INSERT INTO dbo.T3_CustomerDetails(customer_id, first_name, last_name, age, gender, phone)

VALUES(1040, 'Raghav', 'Steel', 23, 'M', '7666054483');
100 % + 4

    Messages

    (1 row affected)
    Completion time: 2021-02-18T20:12:23.3955953+05:30
```

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

```
UNINSERT INTO dbo. T3 BookingDetails

VALUES(1050,123456,1500, '2021-02-18',0,NULL,NULL);

100 % 

Messages

Msg 547, Level 16, State 0, Line 109

The INSERT statement conflicted with the FOREIGN KEY constraint "FK_T3_BookingDetails_T3_CustomerDetails". The conflict occurred in database "T3_Travel", table "dbo.T3_CustomerDetail The statement has been terminated.

Completion time: 2021-02-18T20:17:13.1141473+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

```
DELETE FROM T3_CustomerDetails NHERE

customer_id = 1050;

DELETE FROM T3_CustomerDetails NHERE

customer_id = 1050;

DELETE FROM T3_CustomerDetails NHERE

customer_id = 1050;

DELETE statement on flow of the following of the f
```

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.

```
UPDATE dbo.T3_CustomerDetails

SET last_name = 'Mickey'
WHERE customer_id = 1060

100 % 

Messages

(0 rows affected)

Completion time: 2021-02-18T20:27:21.7989264+05:30
```

7. Add a column which has default value.



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

/*Simple Select Query*/
Select first_name from T3_CustomerDetails where gender = 'M';

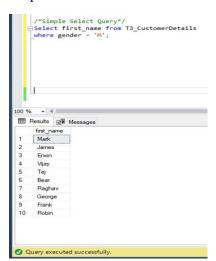
Select top 10 * from T3_CustomerDetails;

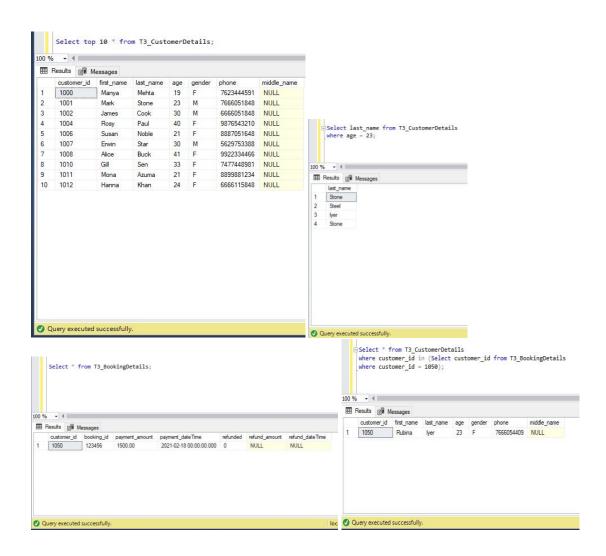
Select last_name from T3_CustomerDetails where age = 23;

Select * from T3_BookingDetails;

Select * from T3_CustomerDetails where customer_id in (Select customer_id from T3_BookingDetails where customer_id = 1050);

Output:





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.

