DBMS Lab Assignment-7

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19BCS052

Group 2: Hotel Database

Q1) Write two stored Procedures relevant to your database.

OUTPUT

```
CREATE PROCEDURE Check_out_list @input date
AS
SELECT * FROM T2_Reservation WHERE Check_out_date = @input;
GO

CREATE PROCEDURE Selectemployeebyname @emp_name varchar(max), @emp_salary int
AS
SELECT * FROM emp_info WHERE empname = @emp_name AND Salary = @emp_salary;
GO

EXEC Check_out_list @input = '1999-02-22';
EXEC Selectemployeebyname @emp_name='Jax', @emp_salary=10000;
```

% ▼

Results | Messages

Reservation_number	Check_in_date	Check_out_date	Number_of_guests	Reservation_date	Customer_ID	Room_number
1	1999-02-03	1999-02-22	5	1999-02-01	2	1
2	1999-02-03	1999-02-22	4	1999-02-03	1	2

Q2) Write a transaction to illustrate atomicity (related to your database)

T2_Customer table before transaction

100 % ▼

Results | Messages

	Customer_ID	Customer_Name	Phone_number	City	State	Zipcode	Email_ID
1	1	Lofflin	8688543748	Nagpur	MP	534201	loff@gmail.com
2	2	Ram	8688543744	hyderabad	TN	534204	Ram@gmail.com
3	3	Mahesh	8688543748	Lucknow	UP	534205	mah@gmail.com
4	4	Prabha	8688543766	Bengaluru	Karnataka	534201	prab@gmail.com

OUTPUT after transaction is successful

```
USE HOTEL;
GO

BEGIN TRANSACTION

   UPDATE T2_Customer SET Customer_Name='Gaikwad' WHERE Customer_ID=1

   INSERT INTO T2_Customer
   VALUES(5,'Sam Curran',123456789,'Chennai','Tamilnadu',534674,'kuttysingam@gmail.com')

   COMMIT TRANSACTION

   SELECT * FROM T2_Customer
```

Results | Messages

Customer_ID	Customer_Name	Phone_number	City	State	Zipcode	Email_ID
1	Gaikwad	8688543748	Nagpur	MP	534201	loff@gmail.com
2	Ram	8688543744	hyderabad	TN	534204	Ram@gmail.com
3	Mahesh	8688543746	Lucknow	UP	534205	mah@gmail.com
4	Prabha	8688543766	Bengaluru	Karnataka	534201	prab@gmail.com
5	Sam Curran	123456789	Chennai	Tamilnadu	534674	kuttysingam@gmail.com

Now, let's insert wrong information in the table on purpose to fail the insertion.

OUTPUT after transaction

```
USE HOTEL;
GO

BEGIN TRANSACTION

   UPDATE T2_Customer SET Email_ID='rocketraja@gmail.com' WHERE Customer_Name='Gaikwad'

   INSERT INTO T2_Customer
   VALUES('Ali',123456788,'chennai','Tamilnadu',534674,'valimaiupdate@gmail.com')

   COMMIT TRANSACTION

   SELECT * FROM T2_Customer
```

Messages

```
Msg 213, Level 16, State 1, Line 9
Column name or number of supplied values does not match table definition.

Completion time: 2021-04-29T16:10:13.8675301+05:30
```
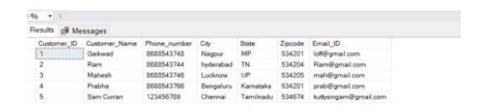
```
USE HOTEL;
GO

BEGIN TRANSACTION

UPDATE T2_Customer SET Email_ID='rocketraja@gmail.com' WHERE Customer_Name='Gaikwad'

INSERT INTO T2_Customer
VALUES('Ali',123456788,'chennai','Tamilnadu',534674,'valimaiupdate@gmail.com')

COMMIT TRANSACTION

SELECT * FROM T2_Customer
```

Results | Messages

Customer_ID	Customer_Name	Phone_number	City	State	Zipcode	Email_ID
1	Gaikwad	8688543748	Nagpur	MP	534201	loff@gmail.com
2	Ram	8688543744	hyderabad	TN	534204	Ram@gmail.com
3	Mahesh	8688543746	Lucknow	UP	534205	mah@gmail.com
4	Prabha	8688543766	Bengaluru	Karnataka	534201	prab@gmail.com
5	Sam Curran	123456789	Chennai	Tamilnadu	534674	kuttysingam@gmail.com

When there is an error in the transaction, it gets rolled back so that the table has its previous values. The table didn't get updated.

This implies that all the statements inside a transaction should either succeed or fail. This is the Atomicity Property.