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Batch D1
19BCE245
2 February 2021

Practical 2

Do as directed.

Questions numbered from 1 to 10 are completed in practical 1.

11. Change the city of Harsh to Bangalore.

```
SQL> ed

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  1* update client set city='Bangalore' where name='Harsh Desai'

SQL> /

1 row updated.

SQL> select name,city from client where name='Harsh Desai';

NAME            CITY

-------------------- ---------------

Harsh Desai         Bangalore

SQL> spool off;
```

12. Change the city of salesman to Pune. What is wrong in doing this type of query?

```
SQL> update salesman set city='Pune';

4 rows updated.

SQL> select salesmanname,city from salesman;

SALESMANNAME       CITY

-------------------- --------------------
```

```
Aman            Pune

Omkar           Pune

Raj             Pune

Ashish          Pune

SQL> spool off;
```

- *This will change all salesman's city from Mumbai to Pune. not only a specific salesman. So If we want to set the city of only one salesman then we must have to write a condition for name of the salesman in WHERE clause.*

13. Delete all the salesmen whose salaries are equal to Rs. 3500.

```
SQL> delete from salesman where salamt=3500;

1 row deleted.

SQL> select * from salesman;

SALESM SALESMANNAME          ADDRESS1                  ADDRESS2
CITY                    PINCODE STATE             SALAMT  TGTTOGET  YTDSALES
REMARKS

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-------------------- ---------- ---------- ---------- ----------------------------------------------------------------

S01    Aman             A/14                       Worli                  Pune
400002 Maharashtra                  3000       100       50 Good

S02    Omkar            65                         Nariman                Pune
400001 Maharashtra                  3000       200      100 Good

S03    Raj              P-7                  Bandra                 Pune
400032 Maharashtra                  3000       200      100 Good

SQL> spool off;
```

14. Delete all the clients who live in “Tamil Nadu”.

```
SQL> delete from client where state='Tamil Nadu';

1 row deleted.

SQL> select name,state from client;

NAME            STATE

-------------------- ---------------
```

Ivan Bayross Maharashtra

Chhaya Patel Maharashtra

Ashni Joshi Karnataka

Harsh Desai Maharashtra

Deepak Sharma Karnataka

SQL> spool off;

15. Add a column called "Telephone" of data type "Number" and size "10" to the client table.

SQL> alter table client add(Telephone number(10));

Table altered.

SQL> desc client;

Name
Null? Type

CLIENTNO
VARCHAR2(6)

NAME
VARCHAR2(20)

CITY
VARCHAR2(15)

PINCODE
NUMBER(8)

STATE
VARCHAR2(15)

BALDUE
NUMBER(10,5)

TELEPHONE
NUMBER(10)

SQL> spool off;

16. Change the size of sell price to 6, 2. Observe the behavior.

```
SQL> desc product;
Name Type
Null?    Type
----------------------------------------------------------------------------------------------------------------------------------

 PRODUCTNO
VARCHAR2(6)

 DESCRIPTION
VARCHAR2(15)

 PROFITPERCENT
NUMBER(4,2)

 UNITMEASURE
VARCHAR2(10)

 QTYONHAND
NUMBER(8)

 REORDERLVL
NUMBER(8)

 SELLPRICE
NUMBER(8,2)

 COSTPRICE
NUMBER(8,2)

SQL> select * from product;

PRODUC DESCRIPTION    PROFITPERCENT UNITMEASUR QTYONHAND
REORDERLVL  SELLPRICE  COSTPRICE

------ --------------- ------------- ---------- ---------- ---------- ---------- ----------
P00001 1.44 Floppies            5 Piece          100       20       525       500
P03453 Monitors                 6 Piece           10        3     12000     11200
P06734 Mouse                    5 Piece           20        5      1050       500
P07865 1.22 Floppies            5 Piece          100       20       525       500
P07868 Keyboards                2 Piece           10        3      3150      3050

SQL> ed
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  1  alter table product
  2* modify sellprice number(6,2)
SQL> /
modify sellprice number(6,2)
       *
ERROR at line 2:
ORA-01440: column to be modified must be empty to decrease precision or scale
```

```
SQL> spool off;
```

- *Here if we have to decrease precision or scale, the column which has to be modified should be empty so that there will no loss of the data as we going from higher precision to lower precision.*

17. Change the name of salesman table to sman.

```
SQL> rename salesman to sman;
Table renamed.
SQL> spool off;
```

18. Create a new table sales_order_new from sales_order containing data as well as structure.

```
SQL> create table sales_order_new as select * from sales_order;

Table created.

SQL> select * from sales_order_new;

ORDERN CLIENT ORDERSTA SALESM D B DELAYDAT ORDERSTATU

------ ------ -------- ------ - - -------- ----------

019001 C01    12-01-16 S01    F N 20-01-16 In Process

019002 C02    25-01-17 S02    P N 27-01-17 Cancelled

046865 C03    18-02-17 S03    F Y 20-02-17 Fullfilled

019003 C01    03-04-16 S01    F Y 07-04-16 Fullfilled

046866 C04    20-05-16 S04    P N 22-05-16 Cancelled

019008 C05    24-05-16 S05    F N 26-05-16 In Process

6 rows selected.

SQL> spool off;
```

19. Create a new table order_details from sales_order_details containing only the structure (no data).

```
SQL> create table order_details as select * from sales_order_details where 1=2;

Table created.

SQL> select * from order_details;
```

```
no rows selected

SQL> desc order_details;

 Name
Null?    Type

----------------------------------------------------------------------------------------------------------------------------------------
----------------------------------------- --------
----------------------------------------------------------------------------------------------------------------------------

 ORDERNO
VARCHAR2(6)

 PRODUCTNO
VARCHAR2(6)

 QTYORDERED
NUMBER(8)

 PRODUCTRATE
NUMBER(10,2)

SQL> spool off;
```

20. Analyze the commit and rollback behavior of drop, delete and truncate command on sales_order_new.

```
SQL> select * from sales_order_new;

ORDERN CLIENT ORDERSTA SALESM D B DELAYDAT ORDERSTATU

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019001 C01    12-01-16 S01    F N 20-01-16 In Process

019002 C02    25-01-17 S02    P N 27-01-17 Cancelled

046865 C03    18-02-17 S03    F Y 20-02-17 Fullfilled

019003 C01    03-04-16 S01    F Y 07-04-16 Fullfilled

046866 C04    20-05-16 S04    P N 22-05-16 Cancelled

019008 C05    24-05-16 S05    F N 26-05-16 In Process

6 rows selected.


SQL> delete from sales_order_new where clientno='C01';

2 rows deleted.


SQL> select * from sales_order_new;
```

```
ORDERN CLIENT ORDERSTA SALESM D B DELAYDAT ORDERSTATU
------ ------ -------- ------ - - -------- ----------
019002 C02    25-01-17 S02    P N 27-01-17 Cancelled
046865 C03    18-02-17 S03    F Y 20-02-17 Fullfilled
046866 C04    20-05-16 S04    P N 22-05-16 Cancelled
019008 C05    24-05-16 S05    F N 26-05-16 In Process
```

```
SQL> truncate table sales_order_new;

Table truncated.
```

```
SQL> select * from sales_order_new;

no rows selected
```

```
SQL> desc sales_order_new;
 Name
Null?    Type
-----------------------------------------------------------------------------------------------------------------------------------
----------------------------------------- --------
-----------------------------------------------------------------------------------------------------------------------

 ORDERNO
VARCHAR2(6)

 CLIENTNO
VARCHAR2(6)

 ORDERSTATE
DATE

 SALESMANNO
VARCHAR2(6)

 DELAYTYPE
CHAR(1)

 BILLYN
CHAR(1)
```

```
 DELAYDATE
DATE

 ORDERSTATUS
VARCHAR2(10)


SQL> drop table sales_order_new;

Table dropped.


SQL> desc sales_order_new;

ERROR:

ORA-04043: object sales_order_new does not exist


SQL> rollback;

Rollback complete.


SQL> spool off;
```

• *Objects deleted using DROP are permanently lost and it cannot be rolled back.*

Unlike TRUNCATE which only deletes the data of the tables, the DROP command deletes the data of the table as well as removes the entire structure of the table from the database.

• *The COMMIT command is the transactional command used to save changes invoked by a transaction to the database. The COMMIT command saves all the transactions to the database since the last COMMIT or ROLLBACK command.*

• *The ROLLBACK command is the transactional command used to undo transactions that have not already been saved to the database. This command can only be used to undo transactions since the last COMMIT or ROLLBACK command was issued.*