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SUBJECT: database management system (DBMS)
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PRACTICAL:01

QUERY AND OUTPUTS:

1.DESCRIBE DEPOSIT & BRANCH

```
SQL> describe deposit;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 ACTNO                                              VARCHAR2(5)
 CNAME                                              VARCHAR2(18)
 BNAME                                              VARCHAR2(18)
 AMOUNT                                             NUMBER(8,2)
 ADATE                                              DATE

SQL> describe branch;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 BNAME                                              VARCHAR2(18)
 CITY                                               VARCHAR2(18)
```

2.Describe borrow, customers.

```
SQL> describe borrow;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 LOANNO                                             VARCHAR2(5)
 CNAME                                              VARCHAR2(18)
 BNAME                                              VARCHAR2(18)
 AMOUNT                                             NUMBER(8,2)

SQL> describe customers;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 CNAME                                              VARCHAR2(19)
 CITY                                               VARCHAR2(18)
```

3.List all data from table DEPOSIT.

```
SQL> SELECT * FROM DEPOSIT;

ACTNO CNAME                BNAME                     AMOUNT ADATE
----- -------------------- -------------------- ---------- ---------
100   ANIL                 VREC                       1000 01-MAR-95
101   SUNIL                AJNI                       5000 04-JAN-96
102   MEHUL                KAROLBAGH                  3500 17-NOV-95
104   MADHURI              CHANDI                     1200 17-DEC-95
105   PRMOD                M.G.ROAD                   3000 27-MAR-96
106   SANDIP               ANDHERI                    2000 31-MAR-96
107   SHIVANI              VIRAR                      1000 05-SEP-95
108   KRANTI               NEHRU PLACE                5000 02-JUL-95
109   MINU                 POWAI                      7000 10-AUG-95

9 rows selected.
```

4.List all data from table BORROW.

```
SQL> SELECT *FROM BORROW;

LOANN CNAME                BNAME                    AMOUNT
----- -------------------- -------------------- ----------
201   ANIL                 VRCE                       1000
206   MEHUL                AJNI                       5000
311   SUNIL                DHARAMPETH                 3000
321   MADHURI              ANDHERI                    2000
375   PRMOD                VIRAR                      8000
481   KRANTI               NEHRU PLACE                3000

6 rows selected.
```

5.List all data from table CUSTOMERS.

```
SQL> SELECT * FROM CUSTOMERS;

CNAME                CITY
-------------------- --------------------
ANIL                 CALCUTTA
SUNIL                DELHI
MEHUL                BARODA
MANDAR               PATNA
MADHURI              NAGPUR
PRAMOD               NAGPUR
SANDIP               SURAT
SHIVANI              BOMBAY
KRANTI               BOMBAY
NAREN                BOMBAY

10 rows selected.
```

6.List all data from table BRANCH.

```
SQL> SELECT *FROM BRANCH;

BNAME                CITY
-------------------- --------------------
VREC                 NAGPUR
AJNI                 NAGPUR
KAROLBAGH            DELHI
CHANDI               DELHI
DHARAMPETH           NAGPUR
M.G.ROAD             BANGLORE
ANDHERI              BOMBAY
VIRAR                BOMBAY
NEHRU PLACE          DELHI
POWAI                BOMBAY

10 rows selected.
```

7.Give account no and amount of depositors.

```
SQL> SELECT ACTNO,AMOUNT FROM DEPOSIT;

ACTNO      AMOUNT
----- ----------
100          1000
101          5000
102          3500
104          1200
105          3000
106          2000
107          1000
108          5000
109          7000

9 rows selected.
```

8.Give name of depositors having amount greater than 4000.

```
SQL> SELECT CNAME,AMOUNT FROM DEPOSIT WHERE AMOUNT>4000;

CNAME                AMOUNT
-------------------- ----------
SUNIL                  5000
KRANTI                 5000
MINU                   7000

SQL> _
```

9.Give name of customers who opened account after date '1-12-96'.

```
SQL> SELECT CNAME FROM DEPOSIT WHERE ADATE>'1-DEC-96';

no rows selected

SQL> _
```

PRACTICAL:02

QUERY AND OUTPUTS:

(1) Retrieve all data from employee, jobs and deposit.

```
SQL> select*from Employee;

    EMP_NO EMP_NAME                         EMP_SAL   EMP_COMM    DEPT_NO
---------- ------------------------------ ---------- ---------- ----------
       101 smith                                 800                    20
       102 snehal                               1600        300         25
       103 Adama                                1100          0         20
       104 Aman                                 3000                    15
       105 Anita                                5000      50000         10
       106 Sneha                                2450      24500         10
       107 Anamika                              2975                    30

7 rows selected.

SQL> select*from Job;

JOB_ID          JOB_TITLE                      MIN_SAL    MAX_SAL
--------------- ------------------------------ ---------- ----------
IT_PROG         programmer                           4000      10000
MK_MGR          marketing manager                    9000      15000
FI_MGR          finance manager                      8200      12000
FI_ACC          Account                              4200       9000
LEC             Lecturer                             6000      17000
COMP_OP         Computer Operator                    1500       3000

6 rows selected.

SQL> select*from deposit;

A_NO  CNAME           BNAME          AMOUNT A_DATE
----- --------------- ---------- ---------- ---------
101   Anil            andheri          7000 01-JAN-06
102   Sunil           virar            5000 15-JUL-06
103   jay             villeparle       6500 12-MAR-06
104   Vijay           andheri          8000 17-SEP-06
105   Keyur           dadar            7500 19-NOV-06
106   mayur           borivali         5500 21-DEC-06

6 rows selected.
```

2.Give details of account no. and deposited rupees of customers having account opened between Dates 01-01-06 and 25-07-06

```
SQL> select A_NO,AMOUNT FROM deposit where A_DATE between '01-JAN-06' and '25-JUL-06';

A_NO      AMOUNT
----- ----------
101         7000
102         5000
103         6500
```

(3) Display all jobs with minimum salary is greater than 4000.

```
SQL> select JOB_TITLE from Job where MIN_SAL>4000;

JOB_TITLE
------------------------------
marketing manager
finance manager
Account
Lecturer
```

(4)Display name and salary of employee whose department no is 20. Give alias name to name of employee.

```
SQL> select EMP_NAME AS name,EMP_SAL from Employee where DEPT_NO=20;

NAME                           EMP_SAL
------------------------------ ----------
smith                             800
Adama                            1100
```

(5) Display employee no,name and department details of those employee whose department lies in(10,20)

```
SQL> select EMP_NAME,EMP_NO,DEPT_NO from Employee where DEPT_NO between 11 and 19;

EMP_NAME                       EMP_NO    DEPT_NO
------------------------------ ---------- ----------
Aman                              104         15
```

To study various options of LIKE predicate:

(1) Display all employee whose name start with ‘A’ and third character is ‘a’.

```
SQL> select * from Employee where EMP_NAME like 'A_a%';

    EMP_NO EMP_NAME                       EMP_SAL   EMP_COMM    DEPT_NO
---------- ------------------------------ ---------- ---------- ----------
       103 Adama                            1100          0         20
       104 Aman                             3000                    15
       107 Anamika                          2975                    30
```

(2) Display name, number and salary of those employees whose name is 5 characters long and First three characters are ‘Ani’.

```
SQL> SELECT EMP_NAME, EMP_NO, EMP_SAL FROM Employee where EMP_NAME like 'Ani__'and EMP_NAME LIKE '_____%';

EMP_NAME                       EMP_NO    EMP_SAL
------------------------------ ---------- ----------
Anita                             105       5000
```

(3) Display the non-null values of employees and also employee name second character Should be ‘n’ and string should be 5 character long.

```
SQL> SELECT EMP_NAME, EMP_NO, EMP_SAL FROM Employee where EMP_NAME like '_n___';

EMP_NAME                       EMP_NO    EMP_SAL
------------------------------ ---------- ----------
Anita                             105       5000
Sneha                             106       2450
```

(4) Display the null values of employee and also employee name’s third character should be ‘a’.

```
SQL> SELECT * FROM Employee where EMP_COMM is null and EMP_NAME like '__a%';

    EMP_NO EMP_NAME                       EMP_SAL   EMP_COMM    DEPT_NO
---------- ------------------------------ ---------- ---------- ----------
       104 Aman                             3000                    15
       107 Anamika                          2975                    30
```

(5) What will be output if you are giving LIKE predicate as ‘%_%’ ESCAPE ‘\’.

```
SQL> SELECT * FROM Employee WHERE EMP_NAME like '%\%' escape'\';

no rows selected
```

PRACTICAL:03

QUERY AND OUTPUTS:

(1) List total deposit from deposit.

```
SQL> SELECT SUM(AMOUNT) AS TOTAL FROM DEPOSIT UNION SELECT SUM(AMOUNT) AS TOTAL FROM DEPOSIT_1;

    TOTAL
----------
    28700
    39500
```

(2) List total loan from karolbagh branch

```
SQL> SELECT SUM(AMOUNT) FROM DEPOSIT WHERE BNAME='KAROLBAGH';

SUM(AMOUNT)
-----------
       3500
```

(3) Give maximum loan from branch vrce.

```
SQL> SELECT MAX(AMOUNT) FROM DEPOSIT WHERE BNAME='VRCE';

MAX(AMOUNT)
-----------
       1000
```

(4) Count total number of customers

```
SQL> SELECT COUNT(*) AS TOTAL FROM CUSTOMERS;

     TOTAL
----------
        10
```

(5) Count total number of customer's cities.

```
SQL> SELECT COUNT(DISTINCT CITY) FROM CUSTOMERS;

COUNT(DISTINCTCITY)
-------------------
                  7
```

(6) Create table supplier from employee with all the columns.

```
SQL> create table supplier as(select * from Employee);

Table created.

SQL> select* from supplier;

    EMP_NO EMP_NAME                        EMP_SAL   EMP_COMM    DEPT_NO
---------- ------------------------------ ---------- ---------- ----------
       101 smith                             800                    10
       102 snehal                           1600        300         25
       103 RANDOM                           1100          0         20
       104 Aman                             3000                    10
       105 Anita                            5000      50000         10
       106 Sneha                            2450      24500         10
       107 Anamika                          2975                    30

7 rows selected.
```

(7) Create table sup1 from employee with first two columns.

```
SQL> create table SUP1 as(select EMP_NO,EMP_NAME from Employee);

Table created.

SQL> select* from sup1;

    EMP_NO EMP_NAME
---------- ------------------------------
       101 smith
       102 snehal
       103 RANDOM
       104 Aman
       105 Anita
       106 Sneha
       107 Anamika

7 rows selected.
```

(8) Create table sup2 from employee with no data

```
SQL> create table SUP2 as(select * from Employee WHERE 0=1);

Table created.

SQL> select* from sup2;

no rows selected
```

(9) Insert the data into sup2 from employee whose second character should be ‘n’ and string should be 5 characters long in employee name field.

```
SQL> insert into SUP2 (select * from Employee WHERE EMP_NAME  LIKE '_n___');

2 rows created.

SQL> select* from sup2;

    EMP_NO EMP_NAME                         EMP_SAL   EMP_COMM    DEPT_NO
---------- ------------------------------ ---------- ---------- ----------
       105 Anita                                5000      50000         10
       106 Sneha                                2450      24500         10
```

(10) Delete all the rows from sup1.

```
SQL> delete SUP1;

7 rows deleted.

SQL> select* from sUP1;

no rows selected
```

(11) Delete the detail of supplier whose sup_no is 103.

```
SQL> delete supplier where EMP_NO=103;

1 row deleted.
```

(12) Rename the table sup2.

```
SQL> ALTER TABLE SUP2 RENAME TO SUPPP2;

Table altered.
```

(13) Destroy table sup1 with all the data.

```
SQL> DROP TABLE SUP1;

Table dropped.
```

(14) Update the value dept_no to 10 where second character of emp. name is ‘m’.

```
SQL> UPDATE EMPLOYEE SET DEPT_NO=10 WHERE EMP_NAME like '_m%';

2 rows updated.
```

(15) Update the value of employee name whose employee number is 103.

```
SQL> UPDATE EMPLOYEE SET EMP_NAME='RANDOM' WHERE EMP_NO=103;

1 row updated.

SQL> select* from EMPLOYEE;

    EMP_NO EMP_NAME                         EMP_SAL   EMP_COMM    DEPT_NO
---------- ------------------------------ ---------- ---------- ----------
       101 smith                                 800                    10
       102 snehal                               1600        300         25
       103 RANDOM                               1100          0         20
       104 Aman                                 3000                    10
       105 Anita                                5000      50000         10
       106 Sneha                                2450      24500         10
       107 Anamika                              2975                    30

7 rows selected.
```