**Practical 2**

**Arithmetic Operators:**

**Unary - :**

SQL> SELECT -(amount) FROM deposit\_02;

-(AMOUNT)

----------

-1000

-5000

-3500

-1200

-3000

-2000

-1000

-5000

-7000

9 rows selected.

**Unary + :**

SQL> SELECT +(-(amount)) FROM deposit\_02;

+(-(AMOUNT))

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

-1000

-5000

-3500

-1200

-3000

-2000

-1000

-5000

-7000

9 rows selected.

**Binary + :**

SQL> SELECT 1234 + 1234 FROM DUAL;

1234 + 1234

----------

2468

SQL> SELECT AMOUNT + 100 FROM deposit\_02;

AMOUNT+100

----------

1100

5100

3600

1300

3100

2100

1100

5100

7100

9 rows selected.

**Binary - :**

SQL> SELECT 3500 - 1000 FROM DUAL;

3500-1000

----------

2500

**Q. Binary \* :**

SQL> SELECT 3500 \* 1000 FROM DUAL;

3500\*1000

----------

3500000

**Q. Binary / :**

SQL> SELECT 3500 / 1000 FROM DUAL;

3500/1000

----------

3.5

**Logical Operators:**

**Logical AND:**

SQL> SELECT \* FROM DEPOSIT\_02 WHERE CNAME = 'PRAMOD' AND BNAME = 'M.G.ROAD';

AC\_NO CNAME BNAME AMOUNT ADATE

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

105 PRAMOD M.G.ROAD 3000 27-MAR-96

**Logical OR:**

SQL> SELECT \* FROM deposit\_02 WHERE cname = 'SUNIL' OR bname = 'AJNI';

ACTNO CNAME BNAME AMOUNT ADATE

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

101 SUNIL AJNI 5000 04-JAN-96

SQL> SELECT \* FROM deposit\_02 WHERE cname = 'SUNIL' OR bname = 'NEHRU PLACE';

ACTNO CNAME BNAME AMOUNT ADATE

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

101 SUNIL AJNI 5000 04-JAN-96

108 KRANTI NEHRU PLACE 5000 02-JUL-95

**Logical NOT:**

SQL> SELECT \* FROM deposit\_02 WHERE cname <> 'ANIL';

ACTNO CNAME BNAME AMOUNT ADATE

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

101 SUNIL AJNI 5000 04-JAN-96

102 MEHUL KAROLBAGH 3500 17-NOV-95

104 MADHURI CHANDNI 1200 17-DEC-95

105 PRAMOD 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 NAREN POWAI 7000 10-AUG-95

8 rows selected.

**Comparison Operators:**

**Greater than Operator (>):**

SQL> SELECT \* FROM deposit\_02 WHERE amount > 4000;

ACTNO CNAME BNAME AMOUNT ADATE

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

101 SUNIL AJNI 5000 04-JAN-96

108 KRANTI NEHRU PLACE 5000 02-JUL-95

109 NAREN POWAI 7000 10-AUG-95

**Greater than or Equal to Operator (>=):**

SQL> SELECT \* FROM deposit\_02 WHERE amount >= 3000;

ACTNO CNAME BNAME AMOUNT ADATE

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

101 SUNIL AJNI 5000 04-JAN-96

102 MEHUL KAROLBAGH 3500 17-NOV-95

105 PRAMOD M.G.ROAD 3000 27-MAR-96

108 KRANTI NEHRU PLACE 5000 02-JUL-95

109 NAREN POWAI 7000 10-AUG-95

**Lesser than Operator (<):**

SQL> SELECT \* FROM deposit\_02 WHERE amount < 3000;

ACTNO CNAME BNAME AMOUNT ADATE

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

100 ANIL VRCE 1000 01-MAR-95

104 MADHURI CHANDNI 1200 17-DEC-95

106 SANDIP ANDHERI 2000 31-MAR-96

107 SHIVANI VIRAR 1000 05-SEP-95

**Lesser than or Equal to Operator (<=):**

SQL> SELECT \* FROM deposit\_02 WHERE amount <= 3000;

ACTNO CNAME BNAME AMOUNT ADATE

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

100 ANIL VRCE 1000 01-MAR-95

104 MADHURI CHANDNI 1200 17-DEC-95

105 PRAMOD M.G.ROAD 3000 27-MAR-96

106 SANDIP ANDHERI 2000 31-MAR-96

107 SHIVANI VIRAR 1000 05-SEP-95

**Not Equal to Operator (!=):**

SQL> SELECT \* FROM deposit\_02 WHERE amount != 3000;

ACTNO CNAME BNAME AMOUNT ADATE

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

100 ANIL VRCE 1000 01-MAR-95

101 SUNIL AJNI 5000 04-JAN-96

102 MEHUL KAROLBAGH 3500 17-NOV-95

104 MADHURI CHANDNI 1200 17-DEC-95

106 SANDIP ANDHERI 2000 31-MAR-96

107 SHIVANI VIRAR 1000 05-SEP-95

108 KRANTI NEHRU PLACE 5000 02-JUL-95

109 NAREN POWAI 7000 10-AUG-95

8 rows selected.

**Equal to Operator (=):**

SQL> SELECT \* FROM deposit\_02 WHERE amount = 3000;

ACTNO CNAME BNAME AMOUNT ADATE

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

105 PRAMOD M.G.ROAD 3000 27-MAR-96

**View:**

SQL> CREATE VIEW view1 AS SELECT actno, cname FROM deposit\_02;

View created.

SQL> SELECT \* FROM view1;

ACTNO CNAME

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

100 ANIL

101 SUNIL

102 MEHUL

104 MADHURI

105 PRAMOD

106 SANDIP

107 SHIVANI

108 KRANTI

109 NAREN

9 rows selected.

**Sequence:**

SQL> CREATE SEQUENCE SEQ2

2 START WITH 1

3 MAXVALUE 10

4 INCREMENT BY 1

5 CACHE 12;

Sequence created.

SQL> SELECT \* FROM STUDENT\_02;

ID NAME CLASS

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

COLLEGE

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

1 Hammad SYMCA

SPIT

SQL> INSERT INTO STUDENT\_02 VALUES(SEQ2.NEXTVAL, 'NISHITA' , 'FYMCA', 'SPIT2');

1 row created.

SQL> SELECT \* FROM STUDENT\_02;

ID NAME CLASS

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

COLLEGE

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

1 Hammad SYMCA

SPIT

2 NISHITA FYMCA

SPIT2

SQL> SAVEPOINT SB1;

Savepoint created.

SQL> INSERT INTO STUDENT\_02 VALUES(SEQ2.NEXTVAL, 'MAULIKA','SYMCA','SPIT3');

1 row created.

SQL> DROP SEQUENCE SEQ2;

Sequence dropped.

**Basic Queries:**

**Q. List all data from deposit table.**

SELECT \* FROM deposit\_02;

ACTNO CNAME BNAME AMOUNT ADATE

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

100 ANIL VRCE 1000 01-MAR-95

101 SUNIL AJNI 5000 04-JAN-96

102 MEHUL KAROLBAGH 3500 17-NOV-95

104 MADHURI CHANDNI 1200 17-DEC-95

105 PRAMOD 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 NAREN POWAI 7000 10-AUG-95

9 rows selected.

**Q. List all data from borrow table.**

SQL> SELECT \* FROM borrow\_02;

LOANN CNAME BNAME AMOUNT

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

201 ANIL VRCE 1000

206 MEHUL AJNI 5000

311 SUNIL DHARAMPETH 3000

321 MADHURI ANDHERI 2000

375 PRAMOD VIRAR 8000

481 KRANTI NEHRU PLACE 3000

6 rows selected.

**Q. List names of customers living in Nagpur City.**

SQL> SELECT cname FROM customer\_02 WHERE city='NAGPUR';

CNAME

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

MADHURI

PRAMOD

**Q. List names of borrowers having loan number 206.**

SQL> SELECT cname FROM borrow\_02 WHERE loanno=206;

CNAME

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

MEHUL

**Q. List names of depositors having amount greater than 4000.**

SQL> SELECT cname FROM deposit\_02 WHERE amount > 4000;

CNAME

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

SUNIL

KRANTI

NAREN

SQL> SELECT \* FROM deposit\_02;

ACTNO CNAME BNAME AMOUNT ADATE

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

100 ANIL VRCE 1000 01-MAR-95

101 SUNIL AJNI 5000 04-JAN-96

102 MEHUL KAROLBAGH 3500 17-NOV-95

104 MADHURI CHANDNI 1200 17-DEC-95

105 PRAMOD 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 NAREN POWAI 7000 10-AUG-95

9 rows selected.

**Q. List names of customers who opened account after date 1/12/95.**

SQL> SELECT cname FROM deposit\_02 WHERE adate > '1-DEC-95';

CNAME

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

SUNIL

MADHURI

PRAMOD

SANDIP

**Q. List name of the city where the Karol Bagh branch is located.**

SQL> SELECT city FROM branch\_02 WHERE bname = 'KAROLBAGH';

CITY

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

DELHI

**Q. List total loan.**

SQL> SELECT SUM(amount) FROM borrow\_02;

SUM(AMOUNT)

-----------

22000

**Q. List total number of customer cities.**

SQL> SELECT COUNT(DISTINCT city) FROM customer\_02;

COUNT(DISTINCTCITY)

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

7

**Q. Count total number of customers.**

SQL> SELECT COUNT(cname) FROM customer\_02;

COUNT(CNAME)

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

10

**Q. List maximum loan from VRCE branch.**

SQL> SELECT MAX(amount) FROM borrow\_02 WHERE bname = 'VRCE';

MAX(AMOUNT)

-----------

1000

**Q. Add 10% interest to all depositors.**

SQL> UPDATE deposit\_02

2 SET amount = amount + (0.1 \* amount);

9 rows updated.

SQL> SELECT \* FROM deposit\_02;

ACTNO CNAME BNAME AMOUNT ADATE

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

100 ANIL VRCE 1100 01-MAR-95

101 SUNIL AJNI 5500 04-JAN-96

102 MEHUL KAROLBAGH 3850 17-NOV-95

104 MADHURI CHANDNI 1320 17-DEC-95

105 PRAMOD M.G.ROAD 3300 27-MAR-96

106 SANDIP ANDHERI 2200 31-MAR-96

107 SHIVANI VIRAR 1100 05-SEP-95

108 KRANTI NEHRU PLACE 5500 02-JUL-95

109 NAREN POWAI 7700 10-AUG-95

9 rows selected.

**Q. Add 10% interest to all depositors having VRCE branch.**

SQL> UPDATE deposit\_02

2 SET amount = amount + (0.1 \* amount)

3 WHERE bname = 'VRCE';

1 row updated.

SQL> SELECT \* FROM deposit\_02;

ACTNO CNAME BNAME AMOUNT ADATE

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

100 ANIL VRCE 1210 01-MAR-95

101 SUNIL AJNI 5500 04-JAN-96

102 MEHUL KAROLBAGH 3850 17-NOV-95

104 MADHURI CHANDNI 1320 17-DEC-95

105 PRAMOD M.G.ROAD 3300 27-MAR-96

106 SANDIP ANDHERI 2200 31-MAR-96

107 SHIVANI VIRAR 1100 05-SEP-95

108 KRANTI NEHRU PLACE 5500 02-JUL-95

109 NAREN POWAI 7700 10-AUG-95

9 rows selected.

**Q. Delete depositors if the branch is Virar and the depositor's name is Shivani.**

SQL> DELETE FROM deposit\_02 WHERE bname='VIRAR' AND cname = 'SHIVANI';

1 row deleted.

SQL> SELECT \* FROM deposit\_02;

ACTNO CNAME BNAME AMOUNT ADATE

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

100 ANIL VRCE 1210 01-MAR-95

101 SUNIL AJNI 5500 04-JAN-96

102 MEHUL KAROLBAGH 3850 17-NOV-95

104 MADHURI CHANDNI 1320 17-DEC-95

105 PRAMOD M.G.ROAD 3300 27-MAR-96

106 SANDIP ANDHERI 2200 31-MAR-96

108 KRANTI NEHRU PLACE 5500 02-JUL-95

109 NAREN POWAI 7700 10-AUG-95

8 rows selected.

**Q. Delete customers from Mumbai City.**

SQL> DELETE FROM customer\_02 WHERE city = 'MUMBAI';

DELETE FROM customer\_02 WHERE city = 'MUMBAI'

\*

ERROR at line 1:

ORA-02292: integrity constraint (SYSTEM.FK\_CUSTOMER) violated - child record found

**Q. Delete depositor having deposit less than 5000.**

SQL> DELETE FROM deposit\_02 WHERE amount < 5000;

5 rows deleted.

SQL> SELECT \* FROM deposit\_02;

ACTNO CNAME BNAME AMOUNT ADATE

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

101 SUNIL AJNI 5500 04-JAN-96

108 KRANTI NEHRU PLACE 5500 02-JUL-95

109 NAREN POWAI 7700 10-AUG-95

SQL> ROLLBACK;

Rollback complete.

SQL> SELECT \* FROM customer\_02;

CNAME CITY

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

ANIL KOLKATA

SUNIL DELHI

MEHUL BARODA

MANDAR PATNA

MADHURI NAGPUR

PRAMOD NAGPUR

SANDIP SURAT

SHIVANI MUMBAI

KRANTI MUMBAI

NAREN MUMBAI

10 rows selected.

SQL> SELECT \* FROM deposit\_02;

ACTNO CNAME BNAME AMOUNT ADATE

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

100 ANIL VRCE 1000 01-MAR-95

101 SUNIL AJNI 5000 04-JAN-96

102 MEHUL KAROLBAGH 3500 17-NOV-95

104 MADHURI CHANDNI 1200 17-DEC-95

105 PRAMOD 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 NAREN POWAI 7000 10-AUG-95

9 rows selected.

**Subqueries and Joins:**

SQL> select cname from deposit\_02 where bname in (select bname from deposit\_02 where cname='SUNIL');

CNAME

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

SUNIL

JOIN:

SQL> SELECT d.cname FROM deposit\_02 d, deposit\_02 e WHERE d.bname = e.bname AND e.cname = 'SUNIL';

CNAME

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

SUNIL

2. List LoanNo and LoanAmount of borrowers having the same branch as the of depositor SUNIL.

SQL> SELECT loanno, amount FROM borrow\_02 WHERE bname IN (SELECT bname FROM deposit\_02 WHERE cname='SUNIL');

LOANN AMOUNT

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

206 5000

JOIN:

SQL> SELECT b.loanno, b.amount FROM borrow\_02 b, deposit\_02 d WHERE b.bname = d.bname AND d.cname = 'SUNIL';

LOANN AMOUNT

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

206 5000

3. List all depositors living in NAGPUR.

SQL> SELECT cname FROM deposit\_02 WHERE cname IN (SELECT cname FROM customer\_02 WHERE city='NAGPUR');

CNAME

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

MADHURI

PRAMOD

JOIN:

SQL> SELECT d.cname FROM deposit\_02 d, customer\_02 c WHERE d.cname = c.cname AND city = 'NAGPUR';

CNAME

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

MADHURI

PRAMOD

4. List all depositors having deposit in all the branches where SUNIL is having account.

SQL> SELECT cname FROM deposit\_02 WHERE bname IN (SELECT bname FROM deposit\_02 WHERE cname='SUNIL');

CNAME

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

SUNIL

JOIN:

SQL> SELECT d.cname FROM deposit\_02 d, deposit\_02 e WHERE d.bname = e.bname AND e.cname = 'SUNIL';

CNAME

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

SUNIL

5. List names of customers having maximum deposit.

SQL> SELECT cname FROM deposit\_02 WHERE amount = (SELECT MAX(amount) FROM deposit\_02);

CNAME

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

NAREN

JOIN:

SQL> SELECT d1.cname, d1.amount FROM deposit\_02 d1, deposit\_02 d2 HAVING d1.amount = MAX(d2.amount) GROUP BY d1.cname, d1.amount;

CNAME AMOUNT

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

NAREN 7000

6. List names of customers having maximum deposit in the customers living in Nagpur.

SQL> SELECT cname FROM deposit\_02 WHERE amount IN (SELECT MAX(amount) FROM deposit\_02 WHERE cname IN (SELECT cname FROM customer\_02 WHERE city='NAGPUR'));

CNAME

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

PRAMOD

JOIN:

SQL> select og.cname from deposit\_02 og right outer join (select max(amount) as amm from deposit\_02 where cname in (select cname from customer\_22 where city='NAGPUR')) fk on og.amount=fk.amm;

CNAME

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

PRAMOD

7. List the names of branches having highest number of depositors.

SELECT d.bname FROM deposit\_02 d GROUP BY d.bname HAVING COUNT(d.cname) >= ALL(SELECT COUNT(d1.cname) FROM deposit\_02 d1 GROUP BY d1.bname);

BNAME

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

VRCE

AJNI

KAROLBAGH

CHANDNI

M.G.ROAD

VIRAR

POWAI

ANDHERI

NEHRU PLACE

9 rows selected.

JOIN:

SQL> SELECT d.bname FROM deposit\_02 d, deposit\_02 d1 GROUP BY d.bname HAVING COUNT(d.cname) >= COUNT(d1.cname);

BNAME

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

VRCE

AJNI

KAROLBAGH

CHANDNI

M.G.ROAD

VIRAR

POWAI

ANDHERI

NEHRU PLACE

9 rows selected.

8. List the highest deposit of the city where branch of Sunil is located.

SQL> SELECT MAX(amount) FROM deposit\_02 WHERE bname IN (SELECT bname FROM branch\_02 WHERE city IN (SELECT city FROM customer\_02 WHERE cname='SUNIL'));

MAX(AMOUNT)

-----------

5000

JOIN:

SQL> SELECT MAX(d.amount) FROM deposit\_02 d, branch\_02 b, customer\_02 c WHERE d.bname = b.bname AND b.city = c.city AND c.cname = 'SUNIL';

MAX(D.AMOUNT)

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

5000

9. List the names of customers having more deposit than the average deposit in their respective branches.

SQL> SELECT cname FROM deposit\_02 WHERE amount > ANY(SELECT AVG(amount) FROM deposit\_02 WHERE bname IN(SELECT bname FROM branch\_02 GROUP BY bname));

CNAME

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

SUNIL

MEHUL

KRANTI

NAREN

JOIN:

SQL> SELECT d.cname, d.amount FROM deposit\_02 d, deposit\_02 d1, branch\_02 b WHERE d.bname = b.bname HAVING d.amount > AVG(d1.amount) GROUP BY d.cname, d.amount;

CNAME AMOUNT

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

SUNIL 5000

KRANTI 5000

NAREN 7000

MEHUL 3500

10. List the names of branches where number of depositors less than 2.

SELECT bname FROM deposit\_02 HAVING COUNT(cname) < 2 GROUP BY bname;

BNAME

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

VRCE

AJNI

KAROLBAGH

CHANDNI

M.G.ROAD

VIRAR

POWAI

ANDHERI

NEHRU PLACE

9 rows selected.

JOIN:

11. Count the number of customers living in the city where branch is located.

SQL> SELECT COUNT(cname) FROM customer\_02 WHERE city IN (SELECT city FROM branch\_02);

COUNT(CNAME)

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

6

JOIN:

SQL> select count(distinct c.cname) from customer\_02 c, branch\_02 b where c.city = b.city;

COUNT(DISTINCTC.CNAME)

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

6

12. Change the living city of the VRCE branch borrowers to Nagpur.

SQL> SELECT \* FROM customer\_02;

CNAME CITY

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

ANIL KOLKATA

SUNIL DELHI

MEHUL BARODA

MANDAR PATNA

MADHURI NAGPUR

PRAMOD NAGPUR

SANDIP SURAT

SHIVANI MUMBAI

KRANTI MUMBAI

NAREN MUMBAI

10 rows selected.

SQL> UPDATE customer\_02 SET CITY = 'NAGPUR' WHERE cname IN (SELECT cname FROM borrow\_02 WHERE bname = 'VRCE');

1 row updated.

SQL> SELECT \* FROM customer\_02;

CNAME CITY

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

ANIL NAGPUR

SUNIL DELHI

MEHUL BARODA

MANDAR PATNA

MADHURI NAGPUR

PRAMOD NAGPUR

SANDIP SURAT

SHIVANI MUMBAI

KRANTI MUMBAI

NAREN MUMBAI

10 rows selected.

JOIN:

SQL> UPDATE customer\_02 SET city = 'NAGPUR' WHERE cname IN (SELECT c1.cname FROM customer\_02 c1 INNER JOIN borrow\_02 b1 ON c1.cname = b1.cname WHERE b1.bname = 'VRCE');

1 row updated.

13. Update deposit of Anil. Give him maximum deposit from depositors living in city Nagpur.

SQL> UPDATE deposit\_02 SET amount = (SELECT MAX(amount) FROM deposit\_02 WHERE cname IN (SELECT cname FROM customer\_02 WHERE city = 'NAGPUR')) WHERE cname='ANIL';

1 row updated.

SQL> SELECT \* FROM deposit\_02;

ACTNO CNAME BNAME AMOUNT ADATE

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

100 ANIL VRCE 3000 01-MAR-95

101 SUNIL AJNI 5000 04-JAN-96

102 MEHUL KAROLBAGH 3500 17-NOV-95

104 MADHURI CHANDNI 1200 17-DEC-95

105 PRAMOD 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 NAREN POWAI 7000 10-AUG-95

9 rows selected.

JOIN:

SQL> UPDATE deposit\_02 SET amount = (SELECT MAX(amount) FROM deposit\_02 d1 INNER JOIN branch\_02 b1 ON d1.bname = b1.bname WHERE b1.city = 'NAGPUR') WHERE cname = 'ANIL';

1 row updated.

14. Transfer Rs. 100 from account Anil to account Sunil if both are having the same branch.

SQL> UPDATE deposit\_02 SET amount = amount-100 WHERE cname = 'ANIL' AND bname IN (SELECT bname FROM deposit\_02 WHERE cname = 'SUNIL');

0 rows updated.

SQL> UPDATE deposit\_02 SET amount = amount+100 WHERE cname = 'SUNIL' AND bname IN (SELECT bname FROM deposit\_02 WHERE cname = 'ANIL');

0 rows updated.

JOIN:

15. Add Rs. 100 to the account of all those depositors who are having the highest deposit amount in their respective branches.

SQL> UPDATE deposit\_02 SET amount = amount+100 WHERE cname IN(SELECT cname FROM deposit\_02 WHERE amount = ANY(SELECT MAX(amount) FROM deposit\_02 GROUP BY bname));

9 rows updated.

SQL> SELECT \* FROM deposit\_02;

ACTNO CNAME BNAME AMOUNT ADATE

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

100 ANIL VRCE 1100 01-MAR-95

101 SUNIL AJNI 5100 04-JAN-96

102 MEHUL KAROLBAGH 3600 17-NOV-95

104 MADHURI CHANDNI 1300 17-DEC-95

105 PRAMOD M.G.ROAD 3100 27-MAR-96

106 SANDIP ANDHERI 2100 31-MAR-96

107 SHIVANI VIRAR 1100 05-SEP-95

108 KRANTI NEHRU PLACE 5100 02-JUL-95

109 NAREN POWAI 7100 10-AUG-95

9 rows selected.

JOIN:

16. Delete branches having deposit from Nagpur.

SQL> DELETE FROM deposit\_02 WHERE bname IN(SELECT bname FROM branch\_02 WHERE city = 'NAGPUR');

2 rows deleted.

JOIN:

SQL> UPDATE deposit\_02 SET amount = amount + 100 WHERE bname IN (SELECT d1.bname FROM deposit\_02 d1, deposit\_02 d2 GROUP BY d1.bname, d2.bname HAVING AVG(d1.amount) >= MAX(d2.amount) AND d1.bname = d2.bname);

9 rows updated.

17. Delete deposit of Anil and Sunil if both are living in the same city.

SQL> DELETE FROM deposit\_02 WHERE cname IN ('ANIL', 'SUNIL') AND EXISTS(SELECT \* FROM customer\_02 c1, customer\_02 c2 WHERE c1.cname = 'ANIL' AND c2.cname = 'SUNIL' AND c1.city = c2.city);

0 rows deleted.

JOIN:

SQL> DELETE FROM deposit\_02 WHERE cname IN ('ANIL', 'SUNIL') AND EXISTS (SELECT \* FROM customer\_02 c1, customer\_02 c2 WHERE c1.cname = 'ANIL' AND c2.cname = 'SUNIL' AND c1.city = c2.city);

0 rows deleted.

18. Delete borrower of branches having minimum number of customers.

SQL> DELETE FROM borrow\_02 WHERE bname IN (SELECT bname FROM deposit\_02 GROUP BY bname HAVING COUNT(cname) <= ALL(SELECT COUNT(cname) FROM deposit\_02 GROUP BY bname));

5 rows deleted.

JOIN:

SQL> DELETE FROM borrow\_02 WHERE bname IN (SELECT d1.bname FROM deposit\_02 d1, deposit\_02 d2 GROUP BY d1.bname HAVING COUNT(d1.cname) <= COUNT(d2.cname));

5 rows deleted.

19. List names of customers who are depositors as well as borrowers.

SQL> SELECT cname FROM deposit\_02 WHERE cname IN (SELECT cname FROM borrow\_02);

CNAME

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

ANIL

MEHUL

SUNIL

MADHURI

PRAMOD

KRANTI

6 rows selected.

JOIN:

SELECT d.cname FROM deposit\_02 d, borrow\_02 b WHERE d.cname = b.cname;

20. List all the customers who are depositors but not borrowers.

SQL> SELECT cname FROM deposit\_02 WHERE cname NOT IN (SELECT cname FROM borrow\_02);

CNAME

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

SANDIP

NAREN

SHIVANI

JOIN:

SQL> SELECT d.cname FROM deposit\_02 d LEFT OUTER JOIN borrow\_02 b ON d.cname = b.cname WHERE b.cname IS NULL;

CNAME

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

SANDIP

NAREN

SHIVANI

21. List the depositors having the same living city as Sunil and the same branch city as Anil.

SQL> SELECT cname FROM deposit\_02 WHERE cname IN (SELECT cname FROM customer\_02 WHERE city = (SELECT city FROM customer\_02 WHERE cname = 'SUNIL')) AND bname IN (SELECT bname FROM branch\_02 WHERE city = (SELECT city FROM branch\_02 WHERE bname = (SELECT bname FROM deposit\_02 WHERE cname = 'ANIL')));

CNAME

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

SUNIL

JOIN:

SQL> SELECT d1.cname FROM deposit\_02 d1, customer\_02 c1, branch\_02 b1 WHERE c1.cname = d1.cname AND d1.bname = b1.bname AND b1.city IN (SELECT b2.city FROM branch\_02 b2, deposit\_02 d2 WHERE d2.cname = 'ANIL' and d2.bname = b2.bname AND c1.city IN (SELECT c2.city FROM customer\_02 c2 WHERE c2.cname = 'SUNIL'));

CNAME

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

SUNIL

22. List the depositors having amount less than 5000 and living in the city as Shivani.

SQL> SELECT \* FROM deposit\_02 WHERE amount < 5000 AND bname IN (SELECT bname FROM branch\_02 WHERE city IN (SELECT city FROM customer\_02 WHERE cname = 'SHIVANI'));

ACTNO CNAME BNAME AMOUNT ADATE

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

106 SANDIP ANDHERI 2000 31-MAR-96

107 SHIVANI VIRAR 1000 05-SEP-95

JOIN:

SQL> select d.\* from deposit\_02 d, branch\_02 b, customer\_02 c where c.cname = 'SHIVANI' and b.city = c.city and d.bname = b.bname having d.amount < 5000 group by d.cname, d.amount, d.actno, d.bname, d.adate;

ACTNO CNAME BNAME AMOUNT ADATE

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

106 SANDIP ANDHERI 2000 31-MAR-96

107 SHIVANI VIRAR 1000 05-SEP-95

23. List the customers who are borrowers or depositors and having living city Mumbai and the branch city same as that of Sandip.

SQL> SELECT cname FROM deposit\_02 WHERE cname IN (SELECT cname FROM customer\_02 WHERE city = 'MUMBAI') AND bname IN (SELECT bname FROM customer\_02 WHERE city IN (SELECT city FROM branch\_02 WHERE bname IN (SELECT bname FROM deposit\_02 WHERE cname = 'SANDIP')));

CNAME

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

SHIVANI

KRANTI

NAREN

24. List the branch name and branch wise deposit.

SQL> SELECT bname, SUM(amount) FROM deposit\_02 GROUP BY bname;

BNAME SUM(AMOUNT)

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

VRCE 1000

AJNI 5000

KAROLBAGH 3500

CHANDNI 1200

M.G.ROAD 3000

VIRAR 1000

POWAI 7000

ANDHERI 2000

NEHRU PLACE 5000

9 rows selected.

JOIN: --

25. Add 100 to the amount of all depositors having deposit higher than the average deposit of their branch.

SQL> UPDATE deposit\_02 SET amount = amount+100 WHERE cname IN(SELECT cname FROM deposit\_02 WHERE amount >= ANY(SELECT AVG(amount) FROM deposit\_02 GROUP BY bname));

9 rows updated.

SQL> SELECT \* FROM deposit\_02;

ACTNO CNAME BNAME AMOUNT ADATE

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100 ANIL VRCE 1100 01-MAR-95

101 SUNIL AJNI 5100 04-JAN-96

102 MEHUL KAROLBAGH 3600 17-NOV-95

104 MADHURI CHANDNI 1300 17-DEC-95

105 PRAMOD M.G.ROAD 3100 27-MAR-96

106 SANDIP ANDHERI 2100 31-MAR-96

107 SHIVANI VIRAR 1100 05-SEP-95

108 KRANTI NEHRU PLACE 5100 02-JUL-95

109 NAREN POWAI 7100 10-AUG-95

9 rows selected.

JOIN:

26. List names of depositors who has third highest amount.

SQL> SELECT cname FROM(SELECT d.\*, ROW\_NUMBER() OVER (ORDER BY amount DESC) rn FROM deposit\_02 d) WHERE rn = 3;

CNAME

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

KRANTI

JOIN: --

27. List details of depositors according to ascending order of customer names.

SQL> SELECT \* FROM deposit\_02 ORDER BY cname ASC;

ACTNO CNAME BNAME AMOUNT ADATE

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

100 ANIL VRCE 1000 01-MAR-95

108 KRANTI NEHRU PLACE 5000 02-JUL-95

104 MADHURI CHANDNI 1200 17-DEC-95

102 MEHUL KAROLBAGH 3500 17-NOV-95

109 NAREN POWAI 7000 10-AUG-95

105 PRAMOD M.G.ROAD 3000 27-MAR-96

106 SANDIP ANDHERI 2000 31-MAR-96

107 SHIVANI VIRAR 1000 05-SEP-95

101 SUNIL AJNI 5000 04-JAN-96

9 rows selected.

JOIN: --