

**Winter – SEMESTER 2022 - 23 Name:** Nidhi Singh

**Course Code:** MCSE506P **Reg. No:**22MAI0015

**Course-Title:** – Database Systems Lab

**DIGITAL ASSIGNMENT - 1**

**(LAB) Slot-** L29+L30

**Faculty:** Dr. KARTHIK G M - SCOPE

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**1.A CREATION OF SCHEMAS**

**CREATION OF TABLES:**

**SQL> create table customer (customer\_name char(20), customer\_street char(30), customer\_city char(30), primary key(customer\_name));**

|  |
| --- |
| SQL> create table customer(customer\_name char(20),customer\_street char(30),customer\_city char(30) ,primary key(customer\_name));  Table created. |

**SQL> desc customer**

|  |
| --- |
| SQL> desc customer;  Name Null? Type  ----------------------------------------- -------- ----------------------------  CUSTOMER\_NAME NOT NULL CHAR(20)  CUSTOMER\_STREET CHAR(30)  CUSTOMER\_CITY CHAR(30)  SQL> |

**SQL> create table branch (branch\_name char(15),branch\_city char(30), assets numeric(16,2), primary key(branch\_name), check (assets>=0),check(branch\_name in (‘sbi’, ‘pnb’, ‘iob’, ‘icc’, ‘kvb’, ‘icici’, ‘hdfc’, ‘hsbc’)));**

|  |
| --- |
| SQL> create table branch(branch\_name char(15),branch\_city char(30),assets numeri  c(16,2),primary key(branch\_name),check (assets>=0),check(branch\_name in('sbi','p  nb','iob','icc','kvb','icici','hdfc','hsbc')));  Table created. |

**SQL> desc branch**

|  |
| --- |
| SQL> desc branch;  Name Null? Type  ----------------------------------------- -------- ----------------------------  BRANCH\_NAME NOT NULL CHAR(15)  BRANCH\_CITY CHAR(30)  ASSETS NUMBER(16,2)  SQL> |

**SQL> create table account (account\_no char(10),branch\_name char(15), balance numeric (12,2) check (balance >0), primary key(account\_no));**

|  |
| --- |
| SQL> create table account(account\_no char(10),branch\_name char(15),balance numeric(12,2) check(balance>0),primary key(account\_no),foreign key(branch\_name) references branch (branch\_name));  Table created. |

**SQL> desc account**

|  |
| --- |
| SQL> desc account;  Name Null? Type  ----------------------------------------- -------- ----------------------------  ACCOUNT\_NO NOT NULL CHAR(10)  BRANCH\_NAME CHAR(15)  BALANCE NUMBER(12,2) |

**SQL> create table depositor (customer\_name char(20), account\_no char(10), primary key (customer\_name,account\_no));**

|  |
| --- |
| SQL> create table depositor (customer\_name char(20), account\_no char(10), primary key(customer\_name,account\_no));  Table created.  SQL> |

**SQL> desc depositor;**

|  |
| --- |
| SQL> desc depositor;  Name Null? Type  ----------------------------------------- -------- ----------------------------  CUSTOMER\_NAME NOT NULL CHAR(20)  ACCOUNT\_NO NOT NULL CHAR(10)  SQL> |

**SQL> select \* from tab;**

|  |
| --- |
| SQL> select \*from tab;  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_TABPART$  TABLE  LOGMNR\_TABSUBPART$  TABLE  LOGMNR\_TABCOMPART$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_TYPE$  TABLE  LOGMNR\_COLTYPE$  TABLE  LOGMNR\_ATTRIBUTE$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_LOB$  TABLE  LOGMNR\_CON$  TABLE  LOGMNR\_CONTAINER$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_CDEF$  TABLE  LOGMNR\_CCOL$  TABLE  LOGMNR\_ICOL$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_LOBFRAG$  TABLE  LOGMNR\_INDPART$  TABLE  LOGMNR\_INDSUBPART$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_INDCOMPART$  TABLE  LOGMNR\_LOGMNR\_BUILDLOG  TABLE  LOGMNR\_NTAB$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_OPQTYPE$  TABLE  LOGMNR\_SUBCOLTYPE$  TABLE  LOGMNR\_KOPM$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_PROPS$  TABLE  LOGMNR\_ENC$  TABLE  LOGMNR\_REFCON$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_IDNSEQ$  TABLE  LOGMNR\_PARTOBJ$  TABLE  LOGMNRP\_CTAS\_PART\_MAP  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_SHARD\_TS  TABLE  SCHEDULER\_PROGRAM\_ARGS  VIEW  SCHEDULER\_JOB\_ARGS  VIEW  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  SCHEDULER\_PROGRAM\_ARGS\_TBL  TABLE  SCHEDULER\_JOB\_ARGS\_TBL  TABLE  LOGSTDBY$PARAMETERS  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$EVENTS  TABLE  LOGSTDBY$APPLY\_PROGRESS  TABLE  LOGSTDBY$APPLY\_MILESTONE  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$SCN  TABLE  LOGSTDBY$FLASHBACK\_SCN  TABLE  LOGSTDBY$PLSQL  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$SKIP\_TRANSACTION  TABLE  LOGSTDBY$SKIP  TABLE  LOGSTDBY$SKIP\_SUPPORT  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$HISTORY  TABLE  LOGSTDBY$EDS\_TABLES  TABLE  REPL\_VALID\_COMPAT  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  REPL\_SUPPORT\_MATRIX  TABLE  PRODUCT\_PRIVS  VIEW  SQLPLUS\_PRODUCT\_PROFILE  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  PRODUCT\_USER\_PROFILE  SYNONYM  HELP  TABLE  CUSTOMER1  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  DEPOSITOR  TABLE    140 rows selected. |

**SQL> create table customer\_name(cn char(20));**

|  |
| --- |
| SQL> create table customer\_name(cn) as select customer\_name from customer;  Table created. |

**SQL> desc customer\_name;**

|  |
| --- |
| SQL> desc customer\_name;  Name Null? Type  ----------------------------------------- -------- ----------------------  CN CHAR(20)  SQL> |

**SQL> create table depositor (customer\_name char(20), account\_no char(10), primary key (customer\_name, account\_no));**

|  |
| --- |
| SQL> create table depositor (customer\_name char(20), account\_no char(10),primary  key(customer\_name, account\_no));  create table depositor (customer\_name char(20), account\_no char(10),primary key(  customer\_name, account\_no))  \*  ERROR at line 1:  ORA-00955: name is already used by an existing object |

**SQL> desc depositor;**

|  |
| --- |
| SQL> desc depositor;  Name Null? Type  ----------------------------------------- -------- ---------------------  CUSTOMER\_NAME NOT NULL CHAR(20)  ACCOUNT\_NO NOT NULL CHAR(10)  SQL> |

**SQL> create table loan (loan\_no char(20), branch\_name char(20), amount numeric(12,2), primary key(loan\_no));**

|  |
| --- |
| SQL> create table loan(loan\_no char(20),branch\_name char(20), amount numeric(12,2),primary key(loan\_no));  Table created. |

**SQL> desc loan;**

|  |
| --- |
| SQL> desc loan;  Name Null? Type  ----------------------------------------- -------- ---------------------  LOAN\_NO NOT NULL CHAR(20)  BRANCH\_NAME CHAR(20)  AMOUNT NUMBER(12,2) |

**SQL> create table borrower (customer\_name char(20), loan\_no char(20), primary key (customer\_name, loan));**

|  |
| --- |
| SQL> create table borrower(customer\_name char(20),loan\_no char(20),primary key(c  ustomer\_name,loan\_no));  Table created. |

**SQL> desc borrower;**

|  |
| --- |
| SQL> desc borrower;  Name Null? Type  ----------------------------------------- -------- ----------------------------  CUSTOMER\_NAME NOT NULL CHAR(20)  LOAN\_NO NOT NULL CHAR(20)  SQL> |

**SQL> select \* from tab;**

|  |
| --- |
| SQL> select \*from tab;  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_TABPART$  TABLE  LOGMNR\_TABSUBPART$  TABLE  LOGMNR\_TABCOMPART$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_TYPE$  TABLE  LOGMNR\_COLTYPE$  TABLE  LOGMNR\_ATTRIBUTE$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_LOB$  TABLE  LOGMNR\_CON$  TABLE  LOGMNR\_CONTAINER$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_CDEF$  TABLE  LOGMNR\_CCOL$  TABLE  LOGMNR\_ICOL$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_LOBFRAG$  TABLE  LOGMNR\_INDPART$  TABLE  LOGMNR\_INDSUBPART$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_INDCOMPART$  TABLE  LOGMNR\_LOGMNR\_BUILDLOG  TABLE  LOGMNR\_NTAB$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_OPQTYPE$  TABLE  LOGMNR\_SUBCOLTYPE$  TABLE  LOGMNR\_KOPM$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_PROPS$  TABLE  LOGMNR\_ENC$  TABLE  LOGMNR\_REFCON$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_IDNSEQ$  TABLE  LOGMNR\_PARTOBJ$  TABLE  LOGMNRP\_CTAS\_PART\_MAP  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_SHARD\_TS  TABLE  SCHEDULER\_PROGRAM\_ARGS  VIEW  SCHEDULER\_JOB\_ARGS  VIEW  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  SCHEDULER\_PROGRAM\_ARGS\_TBL  TABLE  SCHEDULER\_JOB\_ARGS\_TBL  TABLE  LOGSTDBY$PARAMETERS  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$EVENTS  TABLE  LOGSTDBY$APPLY\_PROGRESS  TABLE  LOGSTDBY$APPLY\_MILESTONE  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$SCN  TABLE  LOGSTDBY$FLASHBACK\_SCN  TABLE  LOGSTDBY$PLSQL  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$SKIP\_TRANSACTION  TABLE  LOGSTDBY$SKIP  TABLE  LOGSTDBY$SKIP\_SUPPORT  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$HISTORY  TABLE  LOGSTDBY$EDS\_TABLES  TABLE  REPL\_VALID\_COMPAT  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  REPL\_SUPPORT\_MATRIX  TABLE  PRODUCT\_PRIVS  VIEW  SQLPLUS\_PRODUCT\_PROFILE  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  PRODUCT\_USER\_PROFILE  SYNONYM  HELP  TABLE  CUSTOMER1  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  DEPOSITOR  TABLE  LOAN  TABLE  CUSTOMER  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  BRANCH  TABLE  ACCOUNT  TABLE  BORROWER  TABLE    156 rows selected.  SQL> |

**CREATING A TABLE WITH ROWS FROM ANOTHER TABLE**

**SQL> create table branch1 (brname, brcity) as select branch\_name, brach\_city from branch;**

|  |
| --- |
| SQL> create table branch1(brname, brcity) as select branch\_name,branch\_city from  branch;  Table created. |

**SQL> select \* from branch1;**

|  |
| --- |
| SQL> select \* from branch1;  BRNAME BRCITY  --------------- ------------------------------  sbi lucknow  pnb mirzapur  iob mumbai  icc sahajahapur  kvb bengal  icici haridwar  hdfc varanasi  hsbc bhuj  8 rows selected. |

**SQL> create table customer1 as select customer\_name, customer\_street, customer\_city from customer where customer\_city in (‘mumbai’, ‘delhi’,‘cochin’);**

|  |
| --- |
| SQL> create table customer1 as select customer\_name,customer\_street,customer\_cit  y from customer where customer\_city in ('mumbai','delhi','varanasi');  Table created. |

**SQL> select \* from customer1**

|  |
| --- |
| SQL> select \*from customer1;  CUSTOMER\_NAME CUSTOMER\_STREET  -------------------- ------------------------------  CUSTOMER\_CITY  ------------------------------  shishir singh samane ghat  varanasi  ishu avalesh pur  varanasi  janhavi gaov devi road  mumbai  CUSTOMER\_NAME CUSTOMER\_STREET  -------------------- ------------------------------  CUSTOMER\_CITY  ------------------------------  ayat ibrahim khan garegaov  mumbai |

**1.B INSERTION RECORDS INTO TABLE:**

**CUSTOMER SCHEMA:**

**SQL> select \* from customer;**

|  |
| --- |
| SQL> select \* from customer;  no rows selected |

**SQL> insert into customer values ('&1','&2','&3');**

|  |
| --- |
| SQL> insert into customer values('nidhi singh','indra nagar','varanasi');  1 row created.  SQL> insert into customer values('neha singh','niyamatpur','mirzapur');  1 row created.  SQL> insert into customer values('nilu singh','bagahi','mirzapur');  1 row created.  SQL> insert into customer values('shishir singh','samane ghat','varanasi');  1 row created.  SQL> insert into customer values('shivani','mankuva','bhuj');  1 row created.  SQL> insert into customer values('ayantika','kolkatta','bengal');  1 row created.  SQL> insert into customer values('shreya','rishikesh','haridwar');  1 row created.  SQL> insert into customer values('vivek','baliya','lala chauk');  1 row created. |

**SQL> select \* from customer;**

|  |
| --- |
| SQL> select \*from customer;  CUSTOMER\_NAME CUSTOMER\_STREET  -------------------- ------------------------------  CUSTOMER\_CITY  ------------------------------  neha singh niyamatpur  mirzapur  nilu singh bagahi  mirzapur  shishir singh samane ghat  varanasi  CUSTOMER\_NAME CUSTOMER\_STREET  -------------------- ------------------------------  CUSTOMER\_CITY  ------------------------------  shivani mankuva  bhuj  ayantika kolkatta  bengal  shreya rishikesh  haridwar  CUSTOMER\_NAME CUSTOMER\_STREET  -------------------- ------------------------------  CUSTOMER\_CITY  ------------------------------  vivek baliya  lala chauk  7 rows selected. |

**SQL> insert into customer values ('&1','&2','&3');**

|  |
| --- |
| SQL> insert into customer values('vaibhav','allahabad','prayagraj');  1 row created.  SQL> insert into customer values('annu','lal nagar','lucknow');  1 row created.  SQL> insert into customer values('ishu','avalesh pur','varanasi');  1 row created.  SQL> insert into customer values('divya pathak','sahajahapur','sahajahapur');  1 row created.  SQL> insert into customer values('saket','sitamadi','balia');  1 row created.  SQL> insert into customer values('janhavi','gaov devi road','mumbai');  1 row created.  SQL> insert into customer values('ayat ibrahim khan','garegaov','mumbai');  1 row created.  SQL> insert into customer values('yashodhara','guvahati','assam');  1 row created. |

**SQL> select \* from customer;**

|  |
| --- |
| SQL> select \*from customer;  CUSTOMER\_NAME CUSTOMER\_STREET  -------------------- ------------------------------  CUSTOMER\_CITY  ------------------------------  neha singh niyamatpur  mirzapur  nilu singh bagahi  mirzapur  shishir singh samane ghat  varanasi  CUSTOMER\_NAME CUSTOMER\_STREET  -------------------- ------------------------------  CUSTOMER\_CITY  ------------------------------  shivani mankuva  bhuj  ayantika kolkatta  bengal  shreya rishikesh  haridwar  CUSTOMER\_NAME CUSTOMER\_STREET  -------------------- ------------------------------  CUSTOMER\_CITY  ------------------------------  vivek baliya  lala chauk  vaibhav allahabad  prayagraj  annu lal nagar  lucknow  CUSTOMER\_NAME CUSTOMER\_STREET  -------------------- ------------------------------  CUSTOMER\_CITY  ------------------------------  ishu avalesh pur  varanasi  divya pathak sahajahapur  sahajahapur  saket sitamadi  balia  CUSTOMER\_NAME CUSTOMER\_STREET  -------------------- ------------------------------  CUSTOMER\_CITY  ------------------------------  janhavi gaov devi road  mumbai  ayat ibrahim khan garegaov  mumbai  yashodhara guvahati  assam  15 rows selected.  SQL> |

**BRANCH SCHEMA:**

**SQL> select \* from branch;**

|  |
| --- |
| SQL> select \* from branch;  no rows selected |

**SQL> insert into branch values ('&branch\_name', '&branch\_city’, &assets);**

|  |
| --- |
| SQL> insert into branch values('sbi','lucknow',1000000);  1 row created.  SQL> insert into branch values('pnb','mirzapur',50000);  1 row created.  SQL> insert into branch values('iob','mumbai',5000000);  1 row created.  SQL> insert into branch values('icc','sahajahapur',960000);  1 row created.  SQL> insert into branch values('kvb','bengal',9060000);  1 row created.  SQL> insert into branch values('icici','haridwar',60000);  1 row created.  SQL> insert into branch values('hdfc','varanasi',800000);  1 row created.  SQL> insert into branch values('hsbc','bhuj',8000000);  1 row created.  SQL> insert into branch values('hsbc','sahajahapur',7000000);  insert into branch values('hsbc','sahajahapur',7000000)  \*  ERROR at line 1:  ORA-00001: unique constraint (SYSTEM.SYS\_C008332) violated |

**SQL> select \* from branch;**

|  |
| --- |
| SQL> select \*from branch;  BRANCH\_NAME BRANCH\_CITY ASSETS  --------------- ------------------------------ ----------  sbi lucknow 1000000  pnb mirzapur 50000  iob mumbai 5000000  icc sahajahapur 960000  kvb bengal 9060000  icici haridwar 60000  hdfc varanasi 800000  hsbc bhuj 8000000  8 rows selected. |

**ACCOUNT SCHEMA:**

**SQL> select \* from account;**

|  |
| --- |
| SQL> select \* from account;  no rows selected |

**SQL> insert into account values(‘&account\_no’, ‘&branch\_name’, &balance);**

|  |
| --- |
| SQL> insert into account values('1010','icici',100000);  1 row created.  SQL> insert into account values('1009','hsbc',1000);  1 row created.  SQL> insert into account values('1008','hdfc',60000);  1 row created.  SQL> insert into account values('1007','icici',200000);  1 row created.  SQL> insert into account values('1006','kvb',190000);  1 row created.  SQL> insert into account values('1005','icc',10000);  1 row created.  SQL> insert into account values('1004','iob',500000);  1 row created.  SQL> insert into account values('1003','pnb',900000);  1 row created.  SQL> insert into account values('1002','sbi',907000);  1 row created.  SQL> insert into account values('1001','sbi',298790);  1 row created. |

**SQL> select \* from account;**

|  |
| --- |
| SQL> select \* from account;  ACCOUNT\_NO BRANCH\_NAME BALANCE  ---------- --------------- ----------  1010 icici 100000  1009 hsbc 1000  1008 hdfc 60000  1007 icici 200000  1006 kvb 190000  1005 icc 10000  1004 iob 500000  1003 pnb 900000  1002 sbi 907000  1001 sbi 298790  10 rows selected. |

**DEPOSITOR SCHEMA:**

**SQL> select \* from depositor;**

|  |
| --- |
| SQL> select \* from depositor;  no rows selected |

**SQL> insert into depositor values('&1','&2');**

|  |
| --- |
| SQL> insert into depositor values('divya pathak','1008');  1 row created.  **SQL> select \* from depositor;**  **CUSTOMER\_NAME ACCOUNT\_NO**  **-------------------- ----------**  **divya pathak 1008**  SQL> insert into depositor values('divya pathak','1007');  1 row created.  SQL> insert into depositor values('divya pathak','1006');  1 row created.  SQL> insert into depositor values('divya pathak','1005');  1 row created.  SQL> insert into depositor values('ayat','1005');  1 row created.  SQL> insert into depositor values('ayat','1010');  1 row created.  SQL> insert into depositor values('ayat','1009');  1 row created.  SQL> insert into depositor values('ayat','1008');  1 row created.  SQL> insert into depositor values('ayat','1007');  1 row created.  SQL> insert into depositor values('ayantika','1007');  1 row created.  SQL> insert into depositor values('ayantika','1008');  1 row created.  SQL> insert into depositor values('ayantika','1006');  1 row created.  SQL> insert into depositor values('ayantika','1005');  1 row created.  SQL> insert into depositor values('ayantika','1004');  1 row created.    SQL> insert into depositor values('annu','1004');  1 row created.  SQL> insert into depositor values('annu','1005');  1 row created.  SQL> insert into depositor values('annu','1003');  1 row created.  SQL> insert into depositor values('annu','1002');  1 row created.  SQL> insert into depositor values('annu','1010');  1 row created.  SQL> insert into depositor values('ishu','1002');  1 row created.  SQL> insert into depositor values('ishu','1003');  1 row created.  SQL> insert into depositor values('ishu','1004');  1 row created.  SQL> insert into depositor values('ishu','1005');  1 row created.  SQL> insert into depositor values('ishu','1006');  1 row created.  SQL> insert into depositor values('janhavi','1006');  1 row created.  SQL> insert into depositor values('janhavi','1007');  1 row created.  SQL> insert into depositor values('janhavi','1008');  1 row created.  SQL> insert into depositor values('janhavi','1009');  1 row created.  SQL> insert into depositor values('janhavi','1010');  1 row created.  SQL> insert into depositor values('neha singh','1010');  1 row created.  SQL> insert into depositor values('neha singh','1009');  1 row created.  SQL> insert into depositor values('neha singh','1008');  1 row created.  SQL> insert into depositor values('neha singh','1007');  1 row created.  SQL> insert into depositor values('neha singh','1006');  1 row created.  SQL> insert into depositor values('nilu singh','1006');  1 row created.  SQL> insert into depositor values('nilu singh','1005');  1 row created.  SQL> insert into depositor values('nilu singh','1004');  1 row created.  SQL> insert into depositor values('nilu singh','1003');  1 row created.  SQL> insert into depositor values('nilu singh','1002');  1 row created.  SQL> insert into depositor values('nilu singh','1001');  1 row created.  SQL> insert into depositor values('saket','1001');  1 row created.  SQL> insert into depositor values('saket','1010');  1 row created.  SQL> insert into depositor values('saket','1009');  1 row created.  SQL> insert into depositor values('saket','1008');  1 row created.  SQL> insert into depositor values('saket','1007');  1 row created.  SQL> insert into depositor values('shishir singh','1007');  1 row created.  SQL> insert into depositor values('shishir singh','1006');  1 row created.  SQL> insert into depositor values('shishir singh','1005');  1 row created.  SQL> insert into depositor values('shishir singh','1004');  1 row created.  SQL> insert into depositor values('shishir singh','1003');  1 row created.  SQL> insert into depositor values('shishir singh','1001');  1 row created.  SQL> insert into depositor values('shivani','1006');  1 row created.  SQL> insert into depositor values('shivani','1010');  1 row created.  SQL> insert into depositor values('shivani','1009');  1 row created.  SQL> insert into depositor values('shivani','1008');  1 row created.  SQL> insert into depositor values('shreya','1008');  1 row created.  SQL> insert into depositor values('shreya','1010');  1 row created.  SQL> insert into depositor values('shreya','1003');  1 row created.  SQL> insert into depositor values('shreya','1001');  1 row created.  SQL> insert into depositor values('shreya','1005');  1 row created.  SQL> insert into depositor values('vaibhav','1005');  1 row created.  SQL> insert into depositor values('vaibhav','1004');  1 row created.  SQL> insert into depositor values('vaibhav','1003');  1 row created.  SQL> insert into depositor values('vaibhav','1001');  1 row created.  SQL> insert into depositor values('vivek','1004');  1 row created.  SQL> insert into depositor values('vivek','1006');  1 row created.  SQL> insert into depositor values('vivek','1008');  1 row created.  SQL> insert into depositor values('vivek','1010');  1 row created. |

**SQL> select \* from depositor;**

|  |
| --- |
| SQL> select \* from depositor;  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  annu 1002  annu 1003  annu 1004  annu 1005  annu 1010  ayantika 1004  ayantika 1005  ayantika 1006  ayantika 1007  ayantika 1008  ayat 1005  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  ayat 1007  ayat 1008  ayat 1009  ayat 1010  divya pathak 1005  divya pathak 1006  divya pathak 1007  divya pathak 1008  ishu 1002  ishu 1003  ishu 1004  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  ishu 1005  ishu 1006  janhavi 1006  janhavi 1007  janhavi 1008  janhavi 1009  janhavi 1010  neha singh 1006  neha singh 1007  neha singh 1008  neha singh 1009  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  neha singh 1010  nilu singh 1001  nilu singh 1002  nilu singh 1003  nilu singh 1004  nilu singh 1005  nilu singh 1006  saket 1001  saket 1007  saket 1008  saket 1009  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  saket 1010  shishir singh 1001  shishir singh 1003  shishir singh 1004  shishir singh 1005  shishir singh 1006  shishir singh 1007  shivani 1006  shivani 1008  shivani 1009  shivani 1010  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  shreya 1001  shreya 1003  shreya 1005  shreya 1008  shreya 1010  vaibhav 1001  vaibhav 1003  vaibhav 1004  vaibhav 1005  vivek 1004  vivek 1006  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  vivek 1008  vivek 1010  68 rows selected. |

**CUSTOMERNAME SCHEMA:**

|  |
| --- |
| SQL> select \* from customer\_name;  select \* from customer\_name  \*  ERROR at line 1:  ORA-00942: table or view does not exist |

**SQL> insert into customer\_name values ('&1');**

|  |
| --- |
| SQL> create table customer\_name(cn) as select customer\_name from customer;  Table created. |

**SQL> select \* from customer\_name;**

|  |
| --- |
| SQL> select \*from customer\_name;  CN  system  --------------------  annu  ayantika  ayat ibrahim khan  divya pathak  ishu  janhavi  neha singh  nilu singh  saket  shishir singh  shivani  CN  --------------------  shreya  vaibhav  vivek  yashodhara  15 rows selected. |

**DEPOSITOR SCHEMA:**

**SQL> select \* from depositor;**

|  |
| --- |
| SQL> select \* from depositor;  no rows selected |

**SQL> insert into depositor values('&1','&2');**

|  |
| --- |
| SQL> insert into depositor values('divya pathak','1008');  1 row created. |

**SQL> select \* from depositor;**

|  |
| --- |
| SQL> select \* from depositor;  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  divya pathak 1008 |

**SQL> insert into depositor values('&1','&2');**

|  |
| --- |
| SQL> insert into depositor values('divya pathak','1007');  1 row created.  SQL> insert into depositor values('divya pathak','1006');  1 row created.  SQL> insert into depositor values('divya pathak','1005');  1 row created.  SQL> insert into depositor values('ayat','1005');  1 row created.  SQL> insert into depositor values('ayat','1010');  1 row created.  SQL> insert into depositor values('ayat','1009');  1 row created.  SQL> insert into depositor values('ayat','1008');  1 row created.  SQL> insert into depositor values('ayat','1007');  1 row created.  SQL> insert into depositor values('ayantika','1007');  1 row created.  SQL> insert into depositor values('ayantika','1008');  1 row created.  SQL> insert into depositor values('ayantika','1006');  1 row created.  SQL> insert into depositor values('ayantika','1005');  1 row created.  SQL> insert into depositor values('ayantika','1004');  1 row created.    SQL> insert into depositor values('annu','1004');  1 row created.  SQL> insert into depositor values('annu','1005');  1 row created.  SQL> insert into depositor values('annu','1003');  1 row created.  SQL> insert into depositor values('annu','1002');  1 row created.  SQL> insert into depositor values('annu','1010');  1 row created.  SQL> insert into depositor values('ishu','1002');  1 row created.  SQL> insert into depositor values('ishu','1003');  1 row created.  SQL> insert into depositor values('ishu','1004');  1 row created.  SQL> insert into depositor values('ishu','1005');  1 row created.  SQL> insert into depositor values('ishu','1006');  1 row created.  SQL> insert into depositor values('janhavi','1006');  1 row created.  SQL> insert into depositor values('janhavi','1007');  1 row created.  SQL> insert into depositor values('janhavi','1008');  1 row created.  SQL> insert into depositor values('janhavi','1009');  1 row created.  SQL> insert into depositor values('janhavi','1010');  1 row created.  SQL> insert into depositor values('neha singh','1010');  1 row created.  SQL> insert into depositor values('neha singh','1009');  1 row created.  SQL> insert into depositor values('neha singh','1008');  1 row created.  SQL> insert into depositor values('neha singh','1007');  1 row created.  SQL> insert into depositor values('neha singh','1006');  1 row created.  SQL> insert into depositor values('nilu singh','1006');  1 row created.  SQL> insert into depositor values('nilu singh','1005');  1 row created.  SQL> insert into depositor values('nilu singh','1004');  1 row created.  SQL> insert into depositor values('nilu singh','1003');  1 row created.  SQL> insert into depositor values('nilu singh','1002');  1 row created.  SQL> insert into depositor values('nilu singh','1001');  1 row created.  SQL> insert into depositor values('saket','1001');  1 row created.  SQL> insert into depositor values('saket','1010');  1 row created.  SQL> insert into depositor values('saket','1009');  1 row created.  SQL> insert into depositor values('saket','1008');  1 row created.  SQL> insert into depositor values('saket','1007');  1 row created.  SQL> insert into depositor values('shishir singh','1007');  1 row created.  SQL> insert into depositor values('shishir singh','1006');  1 row created.  SQL> insert into depositor values('shishir singh','1005');  1 row created.  SQL> insert into depositor values('shishir singh','1004');  1 row created.  SQL> insert into depositor values('shishir singh','1003');  1 row created.  SQL> insert into depositor values('shishir singh','1001');  1 row created.  SQL> insert into depositor values('shivani','1006');  1 row created.  SQL> insert into depositor values('shivani','1010');  1 row created.  SQL> insert into depositor values('shivani','1009');  1 row created.  SQL> insert into depositor values('shivani','1008');  1 row created.  SQL> insert into depositor values('shreya','1008');  1 row created.  SQL> insert into depositor values('shreya','1010');  1 row created.  SQL> insert into depositor values('shreya','1003');  1 row created.  SQL> insert into depositor values('shreya','1001');  1 row created.  SQL> insert into depositor values('shreya','1005');  1 row created.  SQL> insert into depositor values('vaibhav','1005');  1 row created.  SQL> insert into depositor values('vaibhav','1004');  1 row created.  SQL> insert into depositor values('vaibhav','1003');  1 row created.  SQL> insert into depositor values('vaibhav','1001');  1 row created.  SQL> insert into depositor values('vivek','1004');  1 row created.  SQL> insert into depositor values('vivek','1006');  1 row created.  SQL> insert into depositor values('vivek','1008');  1 row created.  SQL> insert into depositor values('vivek','1010');  1 row created. |

**SQL> select \* from depositor;**

|  |
| --- |
| SQL> select \* from depositor;  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  annu 1002  annu 1003  annu 1004  annu 1005  annu 1010  ayantika 1004  ayantika 1005  ayantika 1006  ayantika 1007  ayantika 1008  ayat 1005  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  ayat 1007  ayat 1008  ayat 1009  ayat 1010  divya pathak 1005  divya pathak 1006  divya pathak 1007  divya pathak 1008  ishu 1002  ishu 1003  ishu 1004  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  ishu 1005  ishu 1006  janhavi 1006  janhavi 1007  janhavi 1008  janhavi 1009  janhavi 1010  neha singh 1006  neha singh 1007  neha singh 1008  neha singh 1009  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  neha singh 1010  nilu singh 1001  nilu singh 1002  nilu singh 1003  nilu singh 1004  nilu singh 1005  nilu singh 1006  saket 1001  saket 1007  saket 1008  saket 1009  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  saket 1010  shishir singh 1001  shishir singh 1003  shishir singh 1004  shishir singh 1005  shishir singh 1006  shishir singh 1007  shivani 1006  shivani 1008  shivani 1009  shivani 1010  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  shreya 1001  shreya 1003  shreya 1005  shreya 1008  shreya 1010  vaibhav 1001  vaibhav 1003  vaibhav 1004  vaibhav 1005  vivek 1004  vivek 1006  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  vivek 1008  vivek 1010  68 rows selected. |

**LOAN SCHEMA:**

**SQL> select \* from loan;**

|  |
| --- |
| SQL> select \* from loan;  no rows selected |

**SQL> insert into loan values('&1','&2', &3);**

|  |
| --- |
| **SQL> insert into loan values(10001,'sbi',40000);**  1 row created.  SQL> insert into loan values('10001','sbi',40000);  insert into loan values('10001','sbi',40000)  \*  ERROR at line 1:  ORA-00001: unique constraint (SYSTEM.SYS\_C008321) violated  SQL> insert into loan values('10002','sbi',20000);  1 row created.  SQL> insert into loan values('10003','pnb',200000);  1 row created.  SQL> insert into loan values('10004','iob',1000);  1 row created.  SQL> insert into loan values('10005','icc',10000);  1 row created.  SQL> insert into loan values('10006','kvb',5000);  1 row created.  SQL> insert into loan values('10007','icici',50000);  1 row created.  SQL> insert into loan values('10008','hdfc',29000);  1 row created.  SQL> insert into loan values('10009','hsbc',9000);  1 row created.  SQL> insert into loan values('10010','hsbc',98000);  1 row created.  SQL> insert into loan values('10011','hdfc',6000);  1 row created. |

**SQL> select \* from loan;**

|  |
| --- |
| SQL> select \*from loan;  LOAN\_NO BRANCH\_NAME AMOUNT  -------------------- -------------------- ----------  10001 sbi 40000  10002 sbi 20000  10003 pnb 200000  10004 iob 1000  10005 icc 10000  10006 kvb 5000  10007 icici 50000  10008 hdfc 29000  10009 hsbc 9000  10010 hsbc 98000  10011 hdfc 6000  11 rows selected. |

**SQL> insert into loan values('&1','&2', &3);**

|  |
| --- |
| SQL> insert into loan values('10012','icici',60000);  1 row created.  SQL> insert into loan values('10013','icc',600000);  1 row created.  SQL> insert into loan values('10014','kvb',40000);  1 row created.  SQL> insert into loan values('10015','pnb',340000);  1 row created. |

**SQL> select \* from loan;**

|  |
| --- |
| SQL> select \* from loan;  LOAN\_NO BRANCH\_NAME AMOUNT  -------------------- -------------------- ----------  10001 sbi 40000  10002 sbi 20000  10003 pnb 200000  10004 iob 1000  10005 icc 10000  10006 kvb 5000  10007 icici 50000  10008 hdfc 29000  10009 hsbc 9000  10010 hsbc 98000  10011 hdfc 6000  LOAN\_NO BRANCH\_NAME AMOUNT  -------------------- -------------------- ----------  10012 icici 60000  10013 icc 600000  10014 kvb 40000  10015 pnb 340000  15 rows selected. |

**BORROWER SCHEMA:**

**SQL> select \* from borrower;**

|  |
| --- |
| SQL> select \* from borrower;  no rows selected |

**SQL> insert into borrower values('&1','&2');**

|  |
| --- |
| SQL> insert into borrower values('annu',10001);  1 row created.  SQL> insert into borrower values('shivani','10001');  1 row created.  SQL> insert into borrower values('shivani','10007');  1 row created.  SQL> insert into borrower values('vivek','10001');  1 row created.  SQL> insert into borrower values('annu',10003);  1 row created.  SQL> insert into borrower values('annu',10002);  1 row created.  SQL> insert into borrower values('ayantika',10002);  1 row created.  SQL> insert into borrower values('ayantika','10003');  1 row created.  SQL> insert into borrower values('ayantika','10004');  1 row created.  SQL> insert into borrower values('ayantika','10005');  1 row created.  SQL> insert into borrower values('ishu','10005');  1 row created.  SQL> insert into borrower values('ishu','10006');  1 row created.  SQL> insert into borrower values('ishu','10007');  1 row created.  SQL> insert into borrower values('ishu','10008');  1 row created.  SQL> insert into borrower values('shreya','10008');  1 row created.  SQL> insert into borrower values('shreya','10001');  1 row created.  SQL> insert into borrower values('vivek','10001');  insert into borrower values('vivek','10001')  \*  ERROR at line 1:  ORA-00001: unique constraint (SYSTEM.SYS\_C008336) violated  SQL> insert into borrower values('shivani','10001');  insert into borrower values('shivani','10001')  \*  ERROR at line 1:  ORA-00001: unique constraint (SYSTEM.SYS\_C008336) violated  SQL> insert into borrower values('nilu singh','10001');  1 row created. |

**SQL> select \* from borrower;**

|  |
| --- |
| SQL> select \* from borrower;  CUSTOMER\_NAME LOAN\_NO  -------------------- --------------------  annu 10001  shivani 10001  shivani 10007  vivek 10001  annu 10003  annu 10002  ayantika 10002  ayantika 10003  ayantika 10004  ayantika 10005  ishu 10005  CUSTOMER\_NAME LOAN\_NO  -------------------- --------------------  ishu 10006  ishu 10007  ishu 10008  shreya 10008  shreya 10001  nilu singh 10001  17 rows selected. |

**INSERTING TUPLES FROM EXISTING TABLES**

**SQL> select \* from branch1;**

|  |
| --- |
| SQL> select \* from branch1;  select \* from branch1  \*  ERROR at line 1:  ORA-00942: table or view does not exist |

**SQL> insert into branch1 select branch\_name, branch\_city from branch;**

|  |
| --- |
| SQL> create table branch1(brname, brcity) as select branch\_name,branch\_city from  branch;  Table created. |

**SQL> select \* from branch1;**

|  |
| --- |
| SQL> select \* from branch1;  BRNAME BRCITY  --------------- ------------------------------  sbi lucknow  pnb mirzapur  iob mumbai  icc sahajahapur  kvb bengal  icici haridwar  hdfc varanasi  hsbc bhuj  8 rows selected. |

**SQL> select \* from customer1;**

|  |
| --- |
| SQL> select \* from customer1;  no rows selected |

**SQL> insert into customer1 as select customer\_name, customer \_street, customer\_city from customer where customer city = ‘cochin’;**

|  |
| --- |
| SQL> insert into customer1 select customer\_name, customer\_street,customer\_city f  rom customer where customer\_city='varanasi';  2 rows created. |

**SQL> select \* from customer1;**

|  |
| --- |
| SQL> select \*from customer1;  CUSTOMER\_NAME CUSTOMER\_STREET  -------------------- ------------------------------  CUSTOMER\_CITY  ------------------------------  shishir singh samane ghat  varanasi  ishu avalesh pur  varanasi  janhavi gaov devi road  mumbai  CUSTOMER\_NAME CUSTOMER\_STREET  -------------------- ------------------------------  CUSTOMER\_CITY  ------------------------------  ayat ibrahim khan garegaov  mumbai  shishir singh samane ghat  varanasi  ishu avalesh pur  varanasi  6 rows selected. |

**2.A MODIFYING AND DELETING OF TABLES:**

**ALTERING ATTRIBUTE TO EXISTING TABLE:**

** ADD THE CUSTOMER CITY COLUMN TO CUSTOMER\_NAME TABLE.**

**SQL> desc customer\_name;**

|  |
| --- |
| SQL> desc customer\_name;  Name Null? Type  ----------------------------------------- -------- ----------------------------  CN CHAR(20) |

**SQL> alter table customer\_name add city char(20);**

|  |
| --- |
| SQL> alter table customer\_name add city char(20);  Table altered. |

**SQL> desc customer\_name;**

|  |
| --- |
| SQL> desc customer\_name;  Name Null? Type  ----------------------------------------- -------- ----------------------------  CN CHAR(20)  CITY CHAR(20) |

**SQL> alter table customer\_name drop city;**

|  |
| --- |
| SQL> alter table customer\_name drop column city;  Table altered. |

**SQL> desc customer\_name;**

|  |
| --- |
| SQL> desc customer\_name;  Name Null? Type  ----------------------------------------- -------- ----------------------------  CN CHAR(20) |

**SQL> alter table customer\_name drop primary key;**

|  |
| --- |
| SQL> alter table customer\_name drop primary key;  alter table customer\_name drop primary key  \*  ERROR at line 1:  ORA-02441: Cannot drop nonexistent primary key |

**DELETING A SINGLE RECORD FROM TABLE:**

**DELETE RAM DETAILS FROM CUSTOMER\_NAME**

**SQL> select \* from customer\_name;**

|  |
| --- |
| SQL> select \* from customer\_name;  CN  --------------------  annu  ayantika  ayat ibrahim khan  divya pathak  ishu  janhavi  neha singh  nilu singh  saket  shishir singh  shivani  CN  --------------------  shreya  vaibhav  vivek  yashodhara  15 rows selected. |

**SQL> delete from customer\_name where cn =’janhavi’;**

|  |
| --- |
| SQL> delete from customer\_name where cn='janhavi';  1 row deleted. |

**SQL> select \* from customer\_name;**

|  |
| --- |
| SQL> select \* from customer\_name;  CN  --------------------  annu  ayantika  ayat ibrahim khan  divya pathak  ishu  neha singh  nilu singh  saket  shishir singh  shivani  shreya  CN  --------------------  vaibhav  vivek  yashodhara  14 rows selected. |

**DELETING MULTIPLE RECORDS IN THE TABLE:**

**DELETE CUSTOMER NAME WITH %G%**

**SQL> select \* from customer\_name;**

|  |
| --- |
| SQL> select \* from customer\_name;  CN  --------------------  annu  ayantika  ayat ibrahim khan  divya pathak  ishu  neha singh  nilu singh  saket  shishir singh  shivani  shreya  CN  --------------------  vaibhav  vivek  yashodhara  14 rows selected. |

**SQL> delete from customer\_name where cn like ‘%singh%’;**

|  |
| --- |
| SQL> delete from customer\_name where cn like '%singh%';  3 rows deleted. |

**SQL> select \* from customer\_name;**

|  |
| --- |
| SQL> select \* from customer\_name;  CN  --------------------  annu  ayantika  ayat ibrahim khan  divya pathak  ishu  saket  shivani  shreya  vaibhav  vivek  yashodhara  11 rows selected. |

**DELETING ALL IN THE TABLE:**

**DELETE ALL ROWS IN CUSTOMER\_NAME TABLE**

**SQL> select \* from customer\_name;**

|  |
| --- |
| SQL> select \* from customer\_name;  CN  --------------------  annu  ayantika  ayat ibrahim khan  divya pathak  ishu  saket  shivani  shreya  vaibhav  vivek  yashodhara  11 rows selected. |

**SQL> delete customer\_name;**

|  |
| --- |
| SQL> delete customer\_name;  11 rows deleted. |

**DELETING ATTRIBUTE FROM TABLE:**

**DELETE CUSTOMER\_NAME COLUMN FROM CUSTOMER TABLE.**

**SQL> select \* from customer\_name;**

|  |
| --- |
| SQL> select \* from customer\_name;  no rows selected |

**SQL> alter table customer\_name drop column cn;**

|  |
| --- |
| SQL> alter table customer\_name drop column cn;  alter table customer\_name drop column cn  \*  ERROR at line 1:  ORA-12983: cannot drop all columns in a table |

**SQL> select \* from customer\_name;**

|  |
| --- |
| SQL> select \* from customer\_name;  no rows selected |

**DROPING A TABLE:**

**DELETE THE TABLE CUSTOMER\_NAME**

**SQL> select \* from tab;**

|  |
| --- |
| SQL> select \* from tab;  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_TABPART$  TABLE  LOGMNR\_TABSUBPART$  TABLE  LOGMNR\_TABCOMPART$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_TYPE$  TABLE  LOGMNR\_COLTYPE$  TABLE  LOGMNR\_ATTRIBUTE$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_LOB$  TABLE  LOGMNR\_CON$  TABLE  LOGMNR\_CONTAINER$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_CDEF$  TABLE  LOGMNR\_CCOL$  TABLE  LOGMNR\_ICOL$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_LOBFRAG$  TABLE  LOGMNR\_INDPART$  TABLE  LOGMNR\_INDSUBPART$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_INDCOMPART$  TABLE  LOGMNR\_LOGMNR\_BUILDLOG  TABLE  LOGMNR\_NTAB$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_OPQTYPE$  TABLE  LOGMNR\_SUBCOLTYPE$  TABLE  LOGMNR\_KOPM$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_PROPS$  TABLE  LOGMNR\_ENC$  TABLE  LOGMNR\_REFCON$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_IDNSEQ$  TABLE  LOGMNR\_PARTOBJ$  TABLE  LOGMNRP\_CTAS\_PART\_MAP  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_SHARD\_TS  TABLE  SCHEDULER\_PROGRAM\_ARGS  VIEW  SCHEDULER\_JOB\_ARGS  VIEW  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  SCHEDULER\_PROGRAM\_ARGS\_TBL  TABLE  SCHEDULER\_JOB\_ARGS\_TBL  TABLE  LOGSTDBY$PARAMETERS  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$EVENTS  TABLE  LOGSTDBY$APPLY\_PROGRESS  TABLE  LOGSTDBY$APPLY\_MILESTONE  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$SCN  TABLE  LOGSTDBY$FLASHBACK\_SCN  TABLE  LOGSTDBY$PLSQL  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$SKIP\_TRANSACTION  TABLE  LOGSTDBY$SKIP  TABLE  LOGSTDBY$SKIP\_SUPPORT  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$HISTORY  TABLE  LOGSTDBY$EDS\_TABLES  TABLE  REPL\_VALID\_COMPAT  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  REPL\_SUPPORT\_MATRIX  TABLE  PRODUCT\_PRIVS  VIEW  SQLPLUS\_PRODUCT\_PROFILE  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  PRODUCT\_USER\_PROFILE  SYNONYM  HELP  TABLE  CUSTOMER1  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  DEPOSITOR  TABLE  LOAN  TABLE  CUSTOMER  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  BRANCH  TABLE  ACCOUNT  TABLE  BORROWER  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  CUSTOMER\_NAME  TABLE  BRANCH1  TABLE  161 rows selected. |

**SQL> select \* from customer\_name;**

|  |
| --- |
| SQL> select \* from customer\_name;  no rows selected |

**SQL> drop table customer\_name;**

|  |
| --- |
| SQL> drop table customer\_name;  Table dropped. |

**SQL> select \* from customer\_name;**

|  |
| --- |
| SQL> select \*from customer\_name;  select \*from customer\_name  \*  ERROR at line 1:  ORA-00942: table or view does not exist |

**SQL> select \* from tab;**

|  |
| --- |
| SQL> select \* from tab;  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_TABPART$  TABLE  LOGMNR\_TABSUBPART$  TABLE  LOGMNR\_TABCOMPART$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_TYPE$  TABLE  LOGMNR\_COLTYPE$  TABLE  LOGMNR\_ATTRIBUTE$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_LOB$  TABLE  LOGMNR\_CON$  TABLE  LOGMNR\_CONTAINER$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_CDEF$  TABLE  LOGMNR\_CCOL$  TABLE  LOGMNR\_ICOL$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_LOBFRAG$  TABLE  LOGMNR\_INDPART$  TABLE  LOGMNR\_INDSUBPART$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_INDCOMPART$  TABLE  LOGMNR\_LOGMNR\_BUILDLOG  TABLE  LOGMNR\_NTAB$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_OPQTYPE$  TABLE  LOGMNR\_SUBCOLTYPE$  TABLE  LOGMNR\_KOPM$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_PROPS$  TABLE  LOGMNR\_ENC$  TABLE  LOGMNR\_REFCON$  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_IDNSEQ$  TABLE  LOGMNR\_PARTOBJ$  TABLE  LOGMNRP\_CTAS\_PART\_MAP  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGMNR\_SHARD\_TS  TABLE  SCHEDULER\_PROGRAM\_ARGS  VIEW  SCHEDULER\_JOB\_ARGS  VIEW  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  SCHEDULER\_PROGRAM\_ARGS\_TBL  TABLE  SCHEDULER\_JOB\_ARGS\_TBL  TABLE  LOGSTDBY$PARAMETERS  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$EVENTS  TABLE  LOGSTDBY$APPLY\_PROGRESS  TABLE  LOGSTDBY$APPLY\_MILESTONE  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$SCN  TABLE  LOGSTDBY$FLASHBACK\_SCN  TABLE  LOGSTDBY$PLSQL  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$SKIP\_TRANSACTION  TABLE  LOGSTDBY$SKIP  TABLE  LOGSTDBY$SKIP\_SUPPORT  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  LOGSTDBY$HISTORY  TABLE  LOGSTDBY$EDS\_TABLES  TABLE  REPL\_VALID\_COMPAT  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  REPL\_SUPPORT\_MATRIX  TABLE  PRODUCT\_PRIVS  VIEW  SQLPLUS\_PRODUCT\_PROFILE  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  PRODUCT\_USER\_PROFILE  SYNONYM  HELP  TABLE  CUSTOMER1  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  DEPOSITOR  TABLE  LOAN  TABLE  CUSTOMER  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  BRANCH  TABLE  ACCOUNT  TABLE  BORROWER  TABLE  TNAME  --------------------------------------------------------------------------------  TABTYPE CLUSTERID  ------------- ----------  BRANCH1  TABLE  160 rows selected. |

**2.B DML COMMANDS:**

**SELECT CLAUSE:**

** FIND THE NAMES OF ALL BRANCHES IN THE LOAN TABLE.**

**SQL> select branch\_name from loan;**

|  |
| --- |
| SQL> select branch\_name from loan;  BRANCH\_NAME  --------------------  sbi  sbi  pnb  iob  icc  kvb  icici  hdfc  hsbc  hsbc  hdfc  BRANCH\_NAME  --------------------  icici  icc  kvb  pnb  15 rows selected. |

** FIND ALL CUSTOMER NAME ALONG WITH CITY FROM CUSTOMER TABLE.**

**SQL> select customer\_name, customer\_city from customer;**

|  |
| --- |
| SQL> select customer\_name, customer\_city from customer;  CUSTOMER\_NAME CUSTOMER\_CITY  -------------------- ------------------------------  neha singh mirzapur  nilu singh mirzapur  shishir singh varanasi  shivani bhuj  ayantika bengal  shreya haridwar  vivek lala chauk  vaibhav prayagraj  annu lucknow  ishu varanasi  divya pathak sahajahapur  CUSTOMER\_NAME CUSTOMER\_CITY  -------------------- ------------------------------  saket balia  janhavi mumbai  ayat ibrahim khan mumbai  yashodhara assam  15 rows selected. |

**RELATIONAL OPERATORS (=, <, >, <>, ^=)**

** FIND ALL BRANCH** NAMES **WHOSE ASSETS ARE LESS THAN 5000.**

**SQL> select branch\_name from branch where assets <5000;**

|  |
| --- |
| SQL> select branch\_name from branch where assets<5000;  no rows selected |

**SQL> select branch\_name from branch where assets<500000;**

|  |
| --- |
| SQL> select branch\_name from branch where assets<500000;  BRANCH\_NAME  ---------------  pnb  icici |

** FIND ALL CUSTOMER NAMES WHO DO NOT LIVE IN MUMBAI**

**SQL> select customer\_name from customer where customer\_city <> ‘mumbai’;**

|  |
| --- |
| SQL> select customer\_name from customer where customer\_city <> 'mumbai';  CUSTOMER\_NAME  --------------------  neha singh  nilu singh  shishir singh  shivani  ayantika  shreya  vivek  vaibhav  annu  ishu  divya pathak  CUSTOMER\_NAME  --------------------  saket  yashodhara  13 rows selected. |

**LOGICAL OPERATOR**

** FIND THE LOAN NUMBER WITH AMOUNT 1000 OR 5000.**

**SQL> select loan\_number from loan where amount = 1000 or amount = 5000;**

|  |
| --- |
| SQL> select loan\_no from loan where amount=1000 or amount=5000;  LOAN\_NO  --------------------  10004  10006 |

**USING DISTINCT KEYWORD:**

** FIND DISTINCT BRANCH NAME FROM LOAN TABLE.**

**SQL> select distinct branch\_name from loan;**

|  |
| --- |
| SQL> select distinct branch\_name from loan;  BRANCH\_NAME  --------------------  sbi  pnb  iob  icc  kvb  icici  hdfc  hsbc  8 rows selected. |

**USING KEYWORD ALL:**

** FIND ALL BRANCH NAMES FROM LOAN TABLE.**

**SQL> select all branch\_name from loan;**

|  |
| --- |
| SQL> select all branch\_name from loan;  BRANCH\_NAME  --------------------  sbi  sbi  pnb  iob  icc  kvb  icici  hdfc  hsbc  hsbc  hdfc  BRANCH\_NAME  --------------------  icici  icc  kvb  pnb  15 rows selected. |

**USING ARITHMETIC EXPRESSION:**

** FIND THE LOAN NUMBER AND BRANCH NAME WITH 1000 DEDUCTED FROM**

**THEIR AMOUNT IN LOAN TABLE.**

**SQL> select loan\_no,branch\_name,amount-1000 from loan;**

|  |
| --- |
| SQL> select loan\_no,branch\_name,amount-1000 from loan;  LOAN\_NO BRANCH\_NAME AMOUNT-1000  -------------------- -------------------- -----------  10001 sbi 39000  10002 sbi 19000  10003 pnb 199000  10004 iob 0  10005 icc 9000  10006 kvb 4000  10007 icici 49000  10008 hdfc 28000  10009 hsbc 8000  10010 hsbc 97000  10011 hdfc 5000  LOAN\_NO BRANCH\_NAME AMOUNT-1000  -------------------- -------------------- -----------  10012 icici 59000  10013 icc 599000  10014 kvb 39000  10015 pnb 339000  15 rows selected. |

**WHERE CLAUSE:**

** FIND THE LOAN NUMBER BELONG TO SBI WITH AMOUNT GREATER THAN 1000.**

**SQL> select loan\_no from loan where branch\_name='sbi' and amount>1000;**

|  |
| --- |
| SQL> select loan\_no from loan where branch\_name='sbi' and amount >1000;  LOAN\_NO  --------------------  10001  10002 |

** FIND THE ACCOUNT DETAILS WHOSE BALANCE IS BETWEEN 500 AND 2000.**

**SQL> select account\_no from account where balance between 500 and 2000;**

|  |
| --- |
| SQL> select account\_no from account where balance between 500 and 2000;  ACCOUNT\_NO  ----------  1009 |

**ORDERING THE TUPLES:**

** LIST ALL CUSTOMERS IN ALPHABETICAL ORDER WHO HAVE LOAN AT SBI**

**BRANCH.**

**SQL> select distinct customer\_name from borrower,loan where borrower.loan\_no = loan.loan\_no and branch\_name='sbi' order by customer\_name;**

|  |
| --- |
| SQL> select distinct customer\_name from borrower,loan where borrower.loan\_no=loa  n.loan\_no and branch\_name='sbi' order by customer\_name;  CUSTOMER\_NAME  --------------------  annu  ayantika  nilu singh  shivani  shreya  vivek  6 rows selected. |

**LIST ALL CUSTOMERS IN DESCENDING ORDER WHO HAVE LOAN AT SBI BRANCH.**

**SQL> select distinct customer\_name from depositor,account where depositor.account\_no =account.account\_no and branch\_name='pnb' order by customer\_name desc;**

|  |
| --- |
| SQL> select distinct customer\_name from depositor,account where depositor.accoun  t\_no=account.account\_no and branch\_name='pnb' order by customer\_name desc;  CUSTOMER\_NAME  --------------------  vaibhav  shreya  shishir singh  nilu singh  ishu  annu  6 rows selected. |

**SET OPERATION-UNION/INTERSECT/EXCEPT:**

**FIND ALL CUSTOMER HAVING A LOAN , AN ACCOUNT OR BOTH AT THE BANK**

**SQL> (select customer\_name from depositor)union(select customer\_name from borrower);**

|  |
| --- |
| SQL> (select customer\_name from depositor) union (select customer\_name from borr  ower);  CUSTOMER\_NAME  --------------------  annu  ayantika  ayat  divya pathak  ishu  janhavi  neha singh  nilu singh  saket  shishir singh  shivani  CUSTOMER\_NAME  --------------------  shreya  vaibhav  vivek  14 rows selected. |

**USE OF KEYWORD ALL:**

**FIND ALL CUSTOMER HAVING A LOAN , AN ACCOUNT OR BOTH AT THE BANK**

**WITH DUPLICATE VALUES.**

**SQL> (select customer\_name from depositor)union all(select customer\_name from borrower);**

|  |
| --- |
| SQL> select customer\_name from depositor union all select customer\_name from bor  rower;  CUSTOMER\_NAME  --------------------  annu  annu  annu  annu  annu  ayantika  ayantika  ayantika  ayantika  ayantika  ayat  CUSTOMER\_NAME  --------------------  ayat  ayat  ayat  ayat  divya pathak  divya pathak  divya pathak  divya pathak  ishu  ishu  ishu  CUSTOMER\_NAME  --------------------  ishu  ishu  janhavi  janhavi  janhavi  janhavi  janhavi  neha singh  neha singh  neha singh  neha singh  CUSTOMER\_NAME  --------------------  neha singh  nilu singh  nilu singh  nilu singh  nilu singh  nilu singh  nilu singh  saket  saket  saket  saket  CUSTOMER\_NAME  --------------------  saket  shishir singh  shishir singh  shishir singh  shishir singh  shishir singh  shishir singh  shivani  shivani  shivani  shivani  CUSTOMER\_NAME  --------------------  shreya  shreya  shreya  shreya  shreya  vaibhav  vaibhav  vaibhav  vaibhav  vivek  vivek  CUSTOMER\_NAME  --------------------  vivek  vivek  annu  annu  annu  ayantika  ayantika  ayantika  ayantika  ishu  ishu  CUSTOMER\_NAME  --------------------  ishu  ishu  nilu singh  shivani  shivani  shreya  shreya  vivek  85 rows selected. |

**FIND ALL CUSTOMERS WHO HAVE BOTH LOAN AND ACCOUNT AT THE BANK**

**SQL> (select customer\_name from depositor)intersect(select customer\_name from borrower);**

|  |
| --- |
| SQL> (select customer\_name from depositor)intersect(select customer\_name from bo  rrower);  CUSTOMER\_NAME  --------------------  annu  ayantika  ishu  nilu singh  shivani  shreya  vivek  7 rows selected. |

**FIND ALL CUSTOMER WHO HAVE ACCOUNT BUT NO LOAN AT THE BANK.**

**SQL> (select customer\_name from depositor) minus (select customer\_name from borrower);**

|  |
| --- |
| SQL> (select customer\_name from depositor)minus(select customer\_name from borrow  er);  CUSTOMER\_NAME  --------------------  ayat  divya pathak  janhavi  neha singh  saket  shishir singh  vaibhav  7 rows selected. |

**AGGREGATE FUNCTION-AVG/MIN/MAX/SUM/COUNT:**

**FIND THE AVERAGE ACCOUNT BALANCE OF IOB BANK.**

**SQL> select avg(balance)from account where branch\_name='iob';**

|  |
| --- |
| SQL> select avg(balance) from account where branch\_name='iob';  AVG(BALANCE)  ------------  500000 |

**FIND THE AVERAGE ACCOUNT BALANCE AT EACH BRANCH.**

**SQL> select branch\_name,avg(balance) from account group by branch\_name;**

|  |
| --- |
| SQL> select branch\_name,avg(balance) from account group by branch\_name;  BRANCH\_NAME AVG(BALANCE)  --------------- ------------  icici 150000  hsbc 1000  hdfc 60000  kvb 190000  icc 10000  iob 500000  pnb 900000  sbi 602895  8 rows selected. |

**FIND THE NUMBER OF DEPOSITORS FOR EACH BRANCH.**

**SQL> select branch\_name,count(distinct customer\_name) from depositor,account where depositor.account\_no=account.account\_no group by branch\_name;**

|  |
| --- |
| SQL> select branch\_name,count(distinct customer\_name) from depositor,account whe  re depositor.account\_no=account.account\_no group by branch\_name;  BRANCH\_NAME COUNT(DISTINCTCUSTOMER\_NAME)  --------------- ----------------------------  sbi 7  pnb 6  iob 7  icc 9  icici 11  kvb 9  hdfc 9  hsbc 5  8 rows selected. |

**FIND THE BRANCHES WHOSE AVG BALANCE IS GREATER THAN 1200.**

**SQL> select branch\_name,avg(balance) from account group by branch\_name having avg(balance)>1200;**

|  |
| --- |
| SQL> select branch\_name,avg(balance) from account group by branch\_name having av  g(balance)>1200;  BRANCH\_NAME AVG(BALANCE)  --------------- ------------  icici 150000  hdfc 60000  kvb 190000  icc 10000  iob 500000  pnb 900000  sbi 602895  7 rows selected. |

**3. A SUBQUERIES WITH SET OPERATION, JOIN AND CONSTRAINTS:**

**NESTED SUBQUERIES**

**FIND THE AVERAGE BALANCE FOR EACH CUSTOMER WHO LIVES IN MUMBAI**

**AND HAS AT LEAST THREE ACCOUNTS.**

SQL> select depositor.customer\_name,avg(balance) from

depositor,account,customer where

depositor.account\_no=account.account\_no and

depositor.customer\_name=customer.customer\_name and

customer\_city='mumbai' group by depositor.customer\_name having

count(distinct depositor.account\_no)>=3;

|  |
| --- |
| SQL> select depositor.customer\_name,avg(balance) from  2 depositor,account,customer where  3 depositor.account\_no=account.account\_no and  4 depositor.customer\_name=customer.customer\_name and  5 customer\_city='mumbai' group by depositor.customer\_name having  6 count(distinct depositor.account\_no)>=3;  CUSTOMER\_NAME AVG(BALANCE)  -------------------- ------------  janhavi 110200 |

**FIND THE AVERAGE LOAN AMOUNT OF EACH CUSTOMER WHO LIVES IN**

**MUMBAI AND HAS AT LEAST TWO LOANS.**

SQL> select borrower.customer\_name,avg(amount) from

borrower,loan,customer where borrower.loan\_no=loan.loan\_no and

borrower.customer\_name=customer.customer\_name and

customer\_city='mumbai' group by borrower.customer\_name having

count(distinct borrower.loan\_no)>=2;

|  |
| --- |
| SQL> select borrower.customer\_name,avg(amount) from  2 borrower,loan,customer where borrower.loan\_no=loan.loan\_no and  3 borrower.customer\_name=customer.customer\_name and  4 customer\_city='mumbai' group by borrower.customer\_name having  5 count(distinct borrower.loan\_no)>=2;  no rows selected |

SQL> select borrower.customer\_name,avg(amount) from

borrower,loan,customer where borrower.loan\_no=loan.loan\_no and

borrower.customer\_name=customer.customer\_name and

customer\_city='varanasi' group by borrower.customer\_name having

count(distinct borrower.loan\_no)>=2;

|  |
| --- |
| SQL> select borrower.customer\_name,avg(amount) from  2 borrower,loan,customer where borrower.loan\_no=loan.loan\_no and  3 borrower.customer\_name=customer.customer\_name and  4 customer\_city='varanasi' group by borrower.customer\_name having  5 count(distinct borrower.loan\_no)>=2;  CUSTOMER\_NAME AVG(AMOUNT)  -------------------- -----------  ishu 23500 |

** SET MEMBERSHIP:**

** USING KEYWORD IN:**

** FIND THE CUSTOMER WHO LIVES IN CHENNAI OR MUMBAI.**

SQL> select customer\_name from customer where customer\_city in

(‘chennai’, ‘mumbai’);

|  |
| --- |
| SQL> select customer\_name from customer where customer\_city in ('chennai','mumba  i');  CUSTOMER\_NAME  --------------------  janhavi  ayat ibrahim khan |

** FIND THE ACCOUNT NUMBER WHOSE BALANCE IS BETWEEN 1000 AND 5000.**

SQL> select account\_no from accounts where balance between 1000 and

5000;

|  |
| --- |
| **SQL> select account\_no from accounts where balance between 1000 and 5000;**  select account\_no from accounts where balance between 1000 and 5000  \*  ERROR at line 1:  ORA-00942: table or view does not exist |

SQL> select account\_no from account where balance between 1000 and

5000;

|  |
| --- |
| SQL> select account\_no from account where balance between 1000 and 5000;  ACCOUNT\_NO  ----------  1009 |

** FIND THE ACCOUNT NUMBER WHOSE BALANCE IS NOT BETWEEN 1000 AND**

**5000.**

**SQL> select account\_no from accounts where balance not between 1000 and**

**5000;**

|  |
| --- |
| SQL> select account\_no from accounts where balance not between 1000 and 5000;  select account\_no from accounts where balance not between 1000 and 5000  \*  ERROR at line 1:  ORA-00942: table or view does not exist |

**SQL> select account\_no from account where balance not between 1000 and 5000;**

|  |
| --- |
| SQL> select account\_no from account where balance not between 1000 and 5000;  ACCOUNT\_NO  ----------  1010  1008  1007  1006  1005  1004  1003  1002  1001  9 rows selected. |

** FIND THE CUSTOMER WHO HAS LOAN AND ACCOUNT.**

SQL> select distinct customer\_name from borrower where customer\_name

in (select customer\_name from depositor);

|  |
| --- |
| **SQL> select distinct customer\_name from borrower where customer\_name in (select**  **customer\_name from depositor);**  CUSTOMER\_NAME  --------------------  annu  ayantika  ishu  nilu singh  shivani  shreya  vivek  7 rows selected. |

** FIND ALL CUSTOMERS WHO HAVE BOTH AN ACCOUNT AND LOAN AT PNB BANK**

SQL> select distinct customer\_name from borrower,loan where

borrower.loan\_no=loan.loan\_no and branch\_name='pnb' and

(branch\_name,customer\_name) in (select

branch\_name,customer\_name from depositor,account where

depositor.account\_no=account.account\_no);

|  |
| --- |
| **SQL> select distinct customer\_name from borrower,loan where**  **2 borrower.loan\_no=loan.loan\_no and branch\_name='pnb' and**  **3 (branch\_name,customer\_name) in (select**  **4 branch\_name, customer\_name from depositor,account where**  **5 depositor.account\_no=account.account\_no);**  CUSTOMER\_NAME  --------------------  Annu |

** FIND ALL CUSTOMERS WHO DO HAVE LOAN AT THE BANK, BUT DO NOT HAVE**

**AN ACCOUNT AT THE BANK.**

SQL> select distinct customer\_name from borrower where customer\_name

not in(select customer\_name from depositor);

|  |
| --- |
| SQL> select distinct customer\_name from borrower where customer\_name  2 not in(select customer\_name from depositor);  no rows selected |

**Changes done into table :-**

|  |
| --- |
| **SQL> select \* from borrower;**  CUSTOMER\_NAME LOAN\_NO  -------------------- --------------------  annu 10001  annu 10002  annu 10003  ayantika 10002  ayantika 10003  ayantika 10004  ayantika 10005  ishu 10005  ishu 10006  ishu 10007  ishu 10008  CUSTOMER\_NAME LOAN\_NO  -------------------- --------------------  nilu singh 10001  shivani 10001  shivani 10007  shreya 10001  shreya 10008  vivek 10001  17 rows selected.  **SQL> select \* from depositor;**  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  annu 1002  annu 1003  annu 1004  annu 1005  annu 1010  ayantika 1004  ayantika 1005  ayantika 1006  ayantika 1007  ayantika 1008  ayat 1005  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  ayat 1007  ayat 1008  ayat 1009  ayat 1010  divya pathak 1005  divya pathak 1006  divya pathak 1007  divya pathak 1008  ishu 1002  ishu 1003  ishu 1004  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  ishu 1005  ishu 1006  janhavi 1006  janhavi 1007  janhavi 1008  janhavi 1009  janhavi 1010  neha singh 1006  neha singh 1007  neha singh 1008  neha singh 1009  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  neha singh 1010  nilu singh 1001  nilu singh 1002  nilu singh 1003  nilu singh 1004  nilu singh 1005  nilu singh 1006  saket 1001  saket 1007  saket 1008  saket 1009  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  saket 1010  shishir singh 1001  shishir singh 1003  shishir singh 1004  shishir singh 1005  shishir singh 1006  shishir singh 1007  shivani 1006  shivani 1008  shivani 1009  shivani 1010  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  shreya 1001  shreya 1003  shreya 1005  shreya 1008  shreya 1010  vaibhav 1001  vaibhav 1003  vaibhav 1004  vaibhav 1005  vivek 1004  vivek 1006  CUSTOMER\_NAME ACCOUNT\_NO  -------------------- ----------  vivek 1008  vivek 1010  68 rows selected.  **SQL> desc borrower;**  Name Null? Type  ----------------------------------------- -------- ----------------------------  CUSTOMER\_NAME NOT NULL CHAR(20)  LOAN\_NO NOT NULL CHAR(20)  **SQL> insert into borrower values ('Ashish','1004');**  1 row created.  **SQL> insert into borrower values ('MS Dhoni','1005');**  1 row created.  **SQL> insert into borrower values ('papa','1006');**  1 row created.  **SQL> insert into borrower values ('nanu','1007');**  1 row created. |

**SQL> select distinct customer\_name from borrower where customer\_name**

**not in(select customer\_name from depositor);**

|  |
| --- |
| **SQL> select distinct customer\_name from borrower where customer\_name**  **2 not in(select customer\_name from depositor);**  CUSTOMER\_NAME  --------------------  Ashish  papa  MS Dhoni  nanu  SQL> |

** FIND ALL CUSTOMERS WHO DO HAVE ACCOUNT AT THE BANK BUT DO NOT**

**HAVE LOAN AT THE BANK.**

SQL> select distinct customer\_name from depositor where customer\_name

not in(select customer\_name from borrower);

|  |
| --- |
| **SQL> select distinct customer\_name from depositor where customer\_name**  **2 not in(select customer\_name from borrower);**  CUSTOMER\_NAME  --------------------  ayat  vaibhav  divya pathak  saket  neha singh  shishir singh  janhavi  7 rows selected. |

** FIND ALL ACCOUNT HOLDER NAME EXCEPT RAMESH AND SENTHIL**

SQL> select distinct customer\_name from depositor where customer\_name

not in('ramesh','senthil');

|  |
| --- |
| **SQL> select distinct customer\_name from depositor where customer\_name**  **2 not in('ramesh','senthil');**  CUSTOMER\_NAME  --------------------  annu  ayantika  ayat  divya pathak  ishu  janhavi  neha singh  nilu singh  saket  shishir singh  shivani  CUSTOMER\_NAME  --------------------  shreya  vaibhav  vivek  14 rows selected.  SQL> |

** SET COMPARAISON:**

** FIND THE NAMES OF ALL BRANCHES THAT HAVE ASSETS GREATER THAN**

**THOSE OF AT LEAT ONE BRANCH LOCATED IN MUMBAI.**

SQL> select distinct t.branch\_name from branch t, branch s where

t.assets>s.assets and s.branch\_city='mumbai';

|  |
| --- |
| **SQL> select distinct t.branch\_name from branch t, branch s where**  **2 t.assets>s.assets and s.branch\_city='mumbai';**  BRANCH\_NAME  ---------------  kvb  hsbc |

** FIND THE NAMES OF ALL BRANCHES THAT HAVE ASSETS GREATER THAN**

**THOSE OF AT LEAT ONE BRANCH LOCATED IN MUMBAI USING ‘SOME’**

**KEYWORD**

SQL> select branch\_name from branch where assets>some(select assets

from branch where branch\_city='mumbai');

|  |
| --- |
| SQL> select branch\_name from branch where assets>some(select assets from branch  where branch\_city='mumbai');  BRANCH\_NAME  ---------------  Kvb  hsbc |

** FIND THE NAMES OF ALL BRANCHES THAT HAVE AN ASSET VALUE GREATER**

**THAN THAT OF EACH BRANCH IN MUMBAI**

SQL> select branch\_name from branch where assets>all(select assets from

branch where branch\_city='mumbai');

|  |
| --- |
| **SQL> select branch\_name from branch where assets>all(select assets from**  **2 branch where branch\_city='mumbai');**  BRANCH\_NAME  ---------------  hsbc  kvb |

** FIND THE BRANCH THAT HAS THE HIGHEST AVERAGE BALANCE.**

SQL> select branch\_name from account group by branch\_name having

avg(balance)>=all (select avg(balance)from account group by

branch\_name);

|  |
| --- |
| **SQL> select branch\_name from account group by branch\_name having**  **2 avg(balance)>=all (select avg(balance)from account group by**  **3 branch\_name);**  BRANCH\_NAME  ---------------  Pnb |

** FIND THE BRANCH THAT HAS THE HIGHEST AVERAGE BALANCE.**

SQL> select branch\_name,avg(balance) from account group by branch\_name

having avg(balance)<=all(select avg(balance) from account group by

branch\_name);

|  |
| --- |
| **SQL> select branch\_name,avg(balance) from account group by branch\_name**  **2 having avg(balance)<=all(select avg(balance) from account group by**  **3 branch\_name);**  BRANCH\_NAME AVG(BALANCE)  --------------- ------------  hsbc 1000 |

** TEST FOR EMPTY RELATION:**

** FIND ALL CUSTOMERS WHO HAVE BOTH AN ACCOUNT AND LOAN AT THE BANK**

SQL> select customer\_name from borrower where exists(select \* from

depositor where

depositor.customer\_name=borrower.customer\_name);

|  |
| --- |
| **SQL> select customer\_name from borrower where exists(select \*from**  **2 depositor where**  **3 depositor.customer\_name=borrower.customer\_name);**  CUSTOMER\_NAME  --------------------  annu  annu  annu  ayantika  ayantika  ayantika  ayantika  ishu  ishu  ishu  ishu  CUSTOMER\_NAME  --------------------  nilu singh  shivani  shivani  shreya  shreya  vivek  17 rows selected.  SQL> |

** FIND ALL CUSTOMERS WHO DO NOT HAVE BOTH AN ACCOUNT AND LOAN AT**

**THE BANK**

SQL> select customer\_name from borrower where not exists(select \* from

depositor where

depositor.customer\_name=borrower.customer\_name);

|  |
| --- |
| **SQL> select customer\_name from borrower where not exists(select \*from**  **2 depositor where**  **3 depositor.customer\_name=borrower.customer\_name);**  CUSTOMER\_NAME  --------------------  Ashish  papa  MS Dhoni  Nanu |

** FIND ALL CUSTOMERS WHO HAVE AN ACCOUNT AT ALL BRANCHES LOCATED IN**

**MUMBAI**

SQL> select distinct s.customer\_name from depositor s where not

exists((select branch\_name from branch where

branch\_city='mumbai')minus(select r.branch\_name from depositor t

,account r where t.account\_no=r.account\_no and

s.customer\_name=t.customer\_name));

|  |
| --- |
| **SQL> select distinct s.customer\_name from depositor s where not**  **2 exists((select branch\_name from branch where**  **3 branch\_city='mumbai')minus(select r.branch\_name from depositor t**  **4 ,account r where t.account\_no=r.account\_no and**  **5 s.customer\_name=t.customer\_name));**  CUSTOMER\_NAME  --------------------  annu  ayantika  ishu  nilu singh  shishir singh  vaibhav  vivek  7 rows selected. |

** VIEWS:**

SQL> create view allcustomer as(select branch\_name,customer\_name from

depositor,account where depositor.account\_no=account.account\_no)

union(select branch\_name,customer\_name from borrower,loan where

borrower.loan\_no=loan.loan\_no);

|  |
| --- |
| **SQL> create view allcustomer as(select branch\_name,customer\_name from**  **2 depositor,account where depositor.account\_no=account.account\_no)**  **3 union(select branch\_name,customer\_name from borrower,loan where**  **4 borrower.loan\_no=loan.loan\_no);**  View created. |

SQL> create view brtot(branch\_name,totloan)as select

branch\_name,sum(amount)from loan group by branch\_name;

|  |
| --- |
| **SQL> create view brtot(branch\_name,totloan)as select**  **2 branch\_name,sum(amount)from loan group by branch\_name;**  View created. |

SQL> select a.account\_no, v.loan\_no, v.amount-a.amount from account a, (

select distinct l.loan\_no, l.amount from loan l) v where

a.account\_no=l.loan\_no group by rollup a.account\_no, v.loan\_no;

|  |
| --- |
| **SQL> select a.account\_no,v.loan\_no,v.amount-a.balance from account a,(select dis**  **tinct l.loan\_no,l.amount from loan l) v**  **2 where a.account\_no=v.loan\_no**  **3 group by rollup (a.account\_no,v.loan\_no,v.amount-a.balance);**  no rows selected |

** UPDATE:**

|  |
| --- |
| **SQL> select balance from account;**  BALANCE  ----------  100000  1000  60000  200000  190000  10000  500000  900000  907000  298790  10 rows selected. |

SQL> update account set balance=balance-100;

|  |
| --- |
| SQL> update account set balance=balance-100;  10 rows updated. |

|  |
| --- |
| SQL> select balance from account;  BALANCE  ----------  99900  900  59900  199900  189900  9900  499900  899900  906900  298690  10 rows selected. |

SQL> update account set balance=balance\*1.05where

balance>=1000;

|  |
| --- |
| SQL> update account set balance=balance\*1.05  2 where balance>=1000;  9 rows updated. |

|  |
| --- |
| SQL> select balance from account;  BALANCE  ----------  104895  900  62895  209895  199395  10395  524895  944895  952245  313624.5  10 rows selected. |

SQL> update account set balance=balance\*1.06where balance>(select

avg(balance) from account);

|  |
| --- |
| SQL> update account set balance=balance\*1.06  2 where balance>(select avg(balance) from account);  3 rows updated. |

SQL> select balance from account;

|  |
| --- |
| **SQL> select balance from account;**  BALANCE  ----------  104895  900  62895  209895  199395  10395  556388.7  1001588.7  1009379.7  313624.5  10 rows selected. |

**SQL> select \* from account;**

|  |
| --- |
| **SQL> select \* from account;**  ACCOUNT\_NO BRANCH\_NAME BALANCE  ---------- --------------- ----------  1010 icici 104895  1009 hsbc 900  1008 hdfc 62895  1007 icici 209895  1006 kvb 199395  1005 icc 10395  1004 iob 556388.7  1003 pnb 1001588.7  1002 sbi 1009379.7  1001 sbi 313624.5  10 rows selected. |

SQL> update account set balance=case when balance<=1000 then

balance\*1.05 when balance>=1000 and balance<=2000 then balance

\* 1.10 when balance>2000 then balance\*3 else balance\*1.01end;

|  |
| --- |
| **SQL> update account set balance=case**  **2 when balance<=1000 then**  **3 balance\*1.05 when balance>=1000 and balance<=2000 then balance \*1.10 when b**  **alance >2000 then balance\*3 else balance\*1.01 end;**  10 rows updated. |

**SQL> select \* from account;**

|  |
| --- |
| **SQL> select \*from account;**  ACCOUNT\_NO BRANCH\_NAME BALANCE  ---------- --------------- ----------  1010 icici 314685  1009 hsbc 945  1008 hdfc 188685  1007 icici 629685  1006 kvb 598185  1005 icc 31185  1004 iob 1669166.1  1003 pnb 3004766.1  1002 sbi 3028139.1  1001 sbi 940873.5  10 rows selected. |

** JOIN:**

** CARTESIAN JOIN:**

SQL> select account\_no, balance,branch. branch\_name, branch\_city, assets from

account, branch;

|  |
| --- |
| **SQL> select account\_no,balance,branch.branch\_name,branch\_city,assets from accoun**  **t,branch;**  ACCOUNT\_NO BALANCE BRANCH\_NAME BRANCH\_CITY ASSETS  ---------- ---------- --------------- ------------------------------ ----------  1010 314685 sbi lucknow 1000000  1009 945 sbi lucknow 1000000  1008 188685 sbi lucknow 1000000  1007 629685 sbi lucknow 1000000  1006 598185 sbi lucknow 1000000  1005 31185 sbi lucknow 1000000  1004 1669166.1 sbi lucknow 1000000  1003 3004766.1 sbi lucknow 1000000  1002 3028139.1 sbi lucknow 1000000  1001 940873.5 sbi lucknow 1000000  1010 314685 pnb mirzapur 50000  ACCOUNT\_NO BALANCE BRANCH\_NAME BRANCH\_CITY ASSETS  ---------- ---------- --------------- ------------------------------ ----------  1009 945 pnb mirzapur 50000  1008 188685 pnb mirzapur 50000  1007 629685 pnb mirzapur 50000  1006 598185 pnb mirzapur 50000  1005 31185 pnb mirzapur 50000  1004 1669166.1 pnb mirzapur 50000  1003 3004766.1 pnb mirzapur 50000  1002 3028139.1 pnb mirzapur 50000  1001 940873.5 pnb mirzapur 50000  1010 314685 iob mumbai 5000000  1009 945 iob mumbai 5000000  ACCOUNT\_NO BALANCE BRANCH\_NAME BRANCH\_CITY ASSETS  ---------- ---------- --------------- ------------------------------ ----------  1008 188685 iob mumbai 5000000  1007 629685 iob mumbai 5000000  1006 598185 iob mumbai 5000000  1005 31185 iob mumbai 5000000  1004 1669166.1 iob mumbai 5000000  1003 3004766.1 iob mumbai 5000000  1002 3028139.1 iob mumbai 5000000  1001 940873.5 iob mumbai 5000000  1010 314685 icc sahajahapur 960000  1009 945 icc sahajahapur 960000  1008 188685 icc sahajahapur 960000  ACCOUNT\_NO BALANCE BRANCH\_NAME BRANCH\_CITY ASSETS  ---------- ---------- --------------- ------------------------------ ----------  1007 629685 icc sahajahapur 960000  1006 598185 icc sahajahapur 960000  1005 31185 icc sahajahapur 960000  1004 1669166.1 icc sahajahapur 960000  1003 3004766.1 icc sahajahapur 960000  1002 3028139.1 icc sahajahapur 960000  1001 940873.5 icc sahajahapur 960000  1010 314685 kvb bengal 9060000  1009 945 kvb bengal 9060000  1008 188685 kvb bengal 9060000  1007 629685 kvb bengal 9060000  ACCOUNT\_NO BALANCE BRANCH\_NAME BRANCH\_CITY ASSETS  ---------- ---------- --------------- ------------------------------ ----------  1006 598185 kvb bengal 9060000  1005 31185 kvb bengal 9060000  1004 1669166.1 kvb bengal 9060000  1003 3004766.1 kvb bengal 9060000  1002 3028139.1 kvb bengal 9060000  1001 940873.5 kvb bengal 9060000  1010 314685 icici haridwar 60000  1009 945 icici haridwar 60000  1008 188685 icici haridwar 60000  1007 629685 icici haridwar 60000  1006 598185 icici haridwar 60000  ACCOUNT\_NO BALANCE BRANCH\_NAME BRANCH\_CITY ASSETS  ---------- ---------- --------------- ------------------------------ ----------  1005 31185 icici haridwar 60000  1004 1669166.1 icici haridwar 60000  1003 3004766.1 icici haridwar 60000  1002 3028139.1 icici haridwar 60000  1001 940873.5 icici haridwar 60000  1010 314685 hdfc varanasi 800000  1009 945 hdfc varanasi 800000  1008 188685 hdfc varanasi 800000  1007 629685 hdfc varanasi 800000  1006 598185 hdfc varanasi 800000  1005 31185 hdfc varanasi 800000  ACCOUNT\_NO BALANCE BRANCH\_NAME BRANCH\_CITY ASSETS  ---------- ---------- --------------- ------------------------------ ----------  1004 1669166.1 hdfc varanasi 800000  1003 3004766.1 hdfc varanasi 800000  1002 3028139.1 hdfc varanasi 800000  1001 940873.5 hdfc varanasi 800000  1010 314685 hsbc bhuj 8000000  1009 945 hsbc bhuj 8000000  1008 188685 hsbc bhuj 8000000  1007 629685 hsbc bhuj 8000000  1006 598185 hsbc bhuj 8000000  1005 31185 hsbc bhuj 8000000  1004 1669166.1 hsbc bhuj 8000000  ACCOUNT\_NO BALANCE BRANCH\_NAME BRANCH\_CITY ASSETS  ---------- ---------- --------------- ------------------------------ ----------  1003 3004766.1 hsbc bhuj 8000000  1002 3028139.1 hsbc bhuj 8000000  1001 940873.5 hsbc bhuj 8000000  80 rows selected.  SQL> |

** NATURAL JOIN:**

**SQL> select \* from account;**

|  |
| --- |
| **SQL> select \* from account;**  ACCOUNT\_NO BRANCH\_NAME BALANCE  ---------- --------------- ----------  1010 icici 314685  1009 hsbc 945  1008 hdfc 188685  1007 icici 629685  1006 kvb 598185  1005 icc 31185  1004 iob 1669166.1  1003 pnb 3004766.1  1002 sbi 3028139.1  1001 sbi 940873.5  10 rows selected. |

SQL> insert into account values('l7','icic',120000);

|  |
| --- |
| **SQL> insert into account values('17','icici',120000);**  1 row created.  **SQL> select \* from account;**  ACCOUNT\_NO BRANCH\_NAME BALANCE  ---------- --------------- ----------  1010 icici 314685  1009 hsbc 945  1008 hdfc 188685  1007 icici 629685  1006 kvb 598185  1005 icc 31185  1004 iob 1669166.1  1003 pnb 3004766.1  1002 sbi 3028139.1  1001 sbi 940873.5  17 icici 120000  11 rows selected. |

**SQL> select \*from branch;**

|  |
| --- |
| **SQL> select \*from branch;**  BRANCH\_NAME BRANCH\_CITY ASSETS  --------------- ------------------------------ ----------  sbi lucknow 1000000  pnb mirzapur 50000  iob mumbai 5000000  icc sahajahapur 960000  kvb bengal 9060000  icici haridwar 60000  hdfc varanasi 800000  hsbc bhuj 8000000  8 rows selected. |

SQL> insert into branch values('icic','chennai',12344);

|  |
| --- |
| **SQL> insert into branch values('icici','chennai',12344);**  insert into branch values('icici','chennai',12344)  \*  ERROR at line 1:  ORA-00001: unique constraint (SYSTEM.SYS\_C008332) violated |

SQL> select a.account\_no, a.branch\_name, b.branch\_name,

b.branch\_city from account a, branch b where a.branch\_name

= b.branch\_name;

|  |
| --- |
| **SQL> select a.account\_no,a.branch\_name,b.branch\_name,b.branch\_city from account**  **a, branch b where a.branch\_name=b.branch\_name;**  ACCOUNT\_NO BRANCH\_NAME BRANCH\_NAME BRANCH\_CITY  ---------- --------------- --------------- ------------------------------  1010 icici icici haridwar  1009 hsbc hsbc bhuj  1008 hdfc hdfc varanasi  1007 icici icici haridwar  1006 kvb kvb bengal  1005 icc icc sahajahapur  1004 iob iob mumbai  1003 pnb pnb mirzapur  1002 sbi sbi lucknow  1001 sbi sbi lucknow  17 icici icici haridwar  11 rows selected.  SQL> |

** LEFT OUTER JOIN:**

** FIND ALL CUSTOMERS WHO HAVE AN ACCOUNT BUT NO LOAN AT THE BANK**

SQL> select a.account\_no,a.branch\_name,b.branch\_name,b.branch\_city

from account a,branch b where a.branch\_name(+)=b.branch\_name;

|  |
| --- |
| **SQL> select a.account\_no,a.branch\_name,b.branch\_name,b.branch\_city**  **2 from account a,branch b**  **3 where a.branch\_name(+)=b.branch\_name;**  ACCOUNT\_NO BRANCH\_NAME BRANCH\_NAME BRANCH\_CITY  ---------- --------------- --------------- ------------------------------  1010 icici icici haridwar  1009 hsbc hsbc bhuj  1008 hdfc hdfc varanasi  1007 icici icici haridwar  1006 kvb kvb bengal  1005 icc icc sahajahapur  1004 iob iob mumbai  1003 pnb pnb mirzapur  1002 sbi sbi lucknow  1001 sbi sbi lucknow  17 icici icici haridwar  11 rows selected. |

** RIGHT OUTER JOIN:**

** FIND ALL CUSTOMERS WHO HAVE EITHER AN ACCOUNT OR A LOAN AT THE**

**BANK**

SQL> select a.account\_no,a.branch\_name,b.branch\_name,b.branch\_city

from account a,branch b where a.branch\_name = (+)b.branch\_name;

|  |
| --- |
| **SQL> select a.account\_no,a.branch\_name,b.branch\_name,b.branch\_city**  **2 from account a,branch b**  **3 where a.branch\_name=b.branch\_name (+);**  ACCOUNT\_NO BRANCH\_NAME BRANCH\_NAME BRANCH\_CITY  ---------- --------------- --------------- ------------------------------  1002 sbi sbi lucknow  1001 sbi sbi lucknow  1003 pnb pnb mirzapur  1004 iob iob mumbai  1005 icc icc sahajahapur  1006 kvb kvb bengal  1010 icici icici haridwar  1007 icici icici haridwar  17 icici icici haridwar  1008 hdfc hdfc varanasi  1009 hsbc hsbc bhuj  11 rows selected. |

** KEY CONSTRAINT:**

SQL> alter table account add constraint acbr foreign key(branch\_name)

references branch(branch\_name)deferrable\*initially immediate

|  |
| --- |
| **SQL> alter table account add constraint acbr foreign key(branch\_name)**  **2 references branch(branch\_name) deferrable initially immediate;**  alter table account add constraint acbr foreign key(branch\_name)  \*  ERROR at line 1:  ORA-02275: such a referential constraint already exists in the table |

SQL> alter table loan add constraint lobr foreign key(branch\_name)

references branch(branch\_name)deferrable initially deferred;

|  |
| --- |
| **SQL> alter table loan add constraint lobr foreign key(branch\_name)**  **2 references branch(branch\_name) deferrable initially deferred;**  Table altered. |

SQL> alter session set constraint=immediate;

|  |
| --- |
| **SQL> alter session set constraint=immediate;**  Session altered. |

SQL> alter session set constraint=deferred;

|  |
| --- |
| **SQL> alter session set constraint=deferred;**  Session altered. |

SQL> alter table account modify constraint acbr enable validate;

|  |
| --- |
| **SQL> alter table account modify constraint acbr enable validate;**  alter table account modify constraint acbr enable validate  \*  ERROR at line 1:  ORA-02430: cannot enable constraint (ACBR) - no such constraint |

SQL> alter table loan modify constraint lobr enable novalidate;

|  |
| --- |
| **SQL> alter table loan modify constraint lobr enable novalidate;**  Table altered. |

SQL> alter table account modify constraint acbr disable novalidate;

|  |
| --- |
| **SQL> alter table account modify constraint acbr disable novalidate;**  alter table account modify constraint acbr disable novalidate  \*  ERROR at line 1:  ORA-02431: cannot disable constraint (ACBR) - no such constraint |

SQL> alter table account drop primary key;

|  |
| --- |
| **SQL> alter table account drop primary key;**  Table altered. |

** DROPPING A TABLE:**

SQL> alter table account drop constraint acbr;

|  |
| --- |
| **SQL> alter table account drop constraint acbr;**  alter table account drop constraint acbr  \*  ERROR at line 1:  ORA-02443: Cannot drop constraint - nonexistent constraint |

SQL> alter table loan drop constraint lobr;

|  |
| --- |
| **SQL> alter table loan drop constraint lobr;**  Table altered. |