**Oracle iGate Assignments**

**\*\*\*\*D:\oracle\ora92\network\admin\SAMPLE\tnsnames.ora\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

# TNSNAMES.ORA Network Configuration File: D:\oracle\ora92\network\admin\tnsnames.ora

# Generated by Oracle configuration tools.

TRGDB =

(DESCRIPTION =

(ADDRESS\_LIST =

(ADDRESS = (PROTOCOL = TCP)(HOST = 192.168.224.26)(PORT = 1521))

)

(CONNECT\_DATA =

(SERVICE\_NAME = trgdb)

)

)

oraten=

(DESCRIPTION =

(ADDRESS\_LIST =

(ADDRESS = (PROTOCOL = TCP)(HOST = 172.21.17.5)(PORT = 1521))

)

(CONNECT\_DATA =

(SERVICE\_NAME = oraten)

)

)

orcl=

(DESCRIPTION =

(ADDRESS\_LIST =

(ADDRESS = (PROTOCOL = TCP)(HOST = 172.28.40.3)(PORT = 1521))

)

(CONNECT\_DATA =

(SERVICE\_NAME = orcl)

)

)

**\*\*\*\*\*\*\*\*\*\*\*\*\* Designation\_Master \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

create table Designation\_Master(Design\_code number(3) Primary key,Design\_name varchar2(50))

**\*\*\*\*\*\*\*\*\*\*\*\*\*Department\_master\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

create table Department\_master(Dept\_code number(2) Primary key,Dept\_name varchar2(50));

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Student\_Master\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

create table Student\_Master (Student\_Code number(6) primary key,Student\_name varchar2(50),Dept\_Code number(2) ,Student\_dob Date, Student\_Address varchar2(240));

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Student\_Marks\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

create table Student\_Marks (Student\_Code number(6) primary key ,Student\_Year number(5) Not Null,Subject1 number(3),Subject2 Number(3),Subject3 Number(3),Constraint Vai\_Student\_Code\_Con foreign key(Student\_Code) references Student\_Masters(Student\_Code))

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Sequence\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

SQL> create sequence c\_dept\_seq start with 50 minvalue 10 maxvalue 100 increment by 10;

Sequence created.

SQL> insert into vai\_dept values(c\_dept\_seq.nextval,'IT','Pune');

1 row created.

SQL> commit;

Commit complete.

SQL> select \* from vai\_dept;

DEPTNO DNAME LOC

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

50 IT Pune

**Lab 1.1.1)\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Retrieve the details (Name, Salary and dept code) of the employees who are working

in department 20, 30 and 40.

Ans:-select \* from emp where deptno in(10,20,40)

EMPNO ENAME JOB MGR HIREDATE SAL COMM DEPTNO

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

7369 SMITH CLERK 7902 17-DEC-80 8000 20

7566 JONES MANAGER 7839 02-APR-81 2975 20

7782 vaishali MANAGER 7839 09-JUN-81 2450 10

7788 SCOTT ANALYST 7566 19-APR-87 3000 20

7839 KING PRESIDENT 17-NOV-81 5000 10

7876 ADAMS CLERK 7788 23-MAY-87 1100 20

7902 FORD ANALYST 7566 03-DEC-81 3000 20

7934 MILLER CLERK 7782 23-JAN-82 1300 10

8 rows selected.

**Lab 1.1.2)\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display the code, subjects and total marks for every student. Total Marks will be calculated as Subject1+Subject2+Subject3. (Refer Student\_Marks table)

Ans:-select student\_code,subject1,subject2,subject3,(subject1+subject2+subject3) " Total "from student\_marks

STUDENT\_CODE SUBJECT1 SUBJECT2 SUBJECT3 Total

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

1001 55 45 78 178

1002 66 74 88 228

1003 87 54 65 206

1004 65 64 90 219

1005 78 88 65 231

1006 65 86 54 205

1007 67 79 49 195

1008 72 55 55 182

1009 71 59 58 188

1010 68 44 92 204

1011 89 96 78 263

1012 78 56 55 189

1013 75 58 65 198

**Lab 1.1.3)\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

List the name and Designations of the staff who have joined before Jan 2003.

Ans:-select s.staff\_code,s.staff\_name,des.design\_name from staff\_masters s,designation\_masters des where (s.design\_code=des.design\_code) and (s.hiredate<'1-JAN-2003')and(s.staff\_sal between 12000 and 25000)

STAFF\_CODE STAFF\_NAME DESIGN\_NAME

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

100002 Shyam Professor

100003 Mohan Professor

100004 Anil Professor

**Lab 1.1.4)\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

List the code, name, and department number of the employees who have experienceof more than 18 years and sort them based on exep

Ans:

select empno,ename,deptno from emp where months\_between(sysdate,hiredate) >=216 )order by months\_between(sysdate,hiredate)

EMPNO ENAME DEPTNO

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

7876 ADAMS 20

7788 SCOTT 20

7934 MILLER 10

7900 JAMES 30

7902 FORD 20

7839 KING 10

7654 MARTIN 30

7844 TURNER 30

7782 CLARK 10

7698 BLAKE 30

7566 JONES 20

7521 WARD 30

7499 ALLEN 30

7369 SMITH 20

**Lab 1.1.5\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

List the name, designation, and income for 10 years of the employees who are

working in departments 10 and 30

SELECT ename,job,hiredate,trunc((sysdate-hiredate)/365) as "NoOfYears" ,sal,comm ,(sal+NVL(comm,0)) "Income" FROM emp WHERE deptno IN(10,20) AND ((sysdate-hiredate)/365) >32;

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ENAME** | **JOB** | **HIREDATE** | **NoOfYears** | **SAL** | **COMM** | **Income** |
| KING | PRESIDENT | 17-NOV-81 | 32 | 5500 |  | 5500 |
| CLARK | MANAGER | 09-JUN-81 | 32 | 2695 |  | 2695 |
| JONES | MANAGER | 02-APR-81 | 33 | 3272.5 |  | 3272.5 |
| FORD | ANALYST | 03-DEC-81 | 32 | 4180 |  | 4180 |
| SMITH | CLERK | 17-DEC-80 | 33 | 1000 |  | 1000 |
| MILLER | CLERK | 23-JAN-82 | 32 | 1300 |  | 1300 |

**Lab 1.1.6\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

List Display name concatenated with dept code separated by comma and space.

Name the column as ‘Student Info’

select concat(student\_name,concat(', ',dept\_code)) "Student Info " from student\_masters

Student Info

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

Amit, 10

Ravi, 10

Ajay, 20

Raj, 30

Arvind, 40

Rahul, 50

Mehul, 20

Dev, 10

Vijay, 30

Rajat, 40

Sunder, 50

Rajesh, 30

Anil, 20

Sunil, 10

Kapil, 40

Ashok, 40

Ramesh, 30

Amit Raj, 50

Ravi Raj, 50

Amrit, 10

Sumit, 20

21 rows selected.

**Lab 1.1.7) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display employees who do not have manager

Ans:

select \* from emp where mgr is null

EMPNO ENAME JOB MGR HIREDATE SAL COMM dEPTNO

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

7839 KING PRESIDENT 17-NOV-81 5000 10

**Lab 1.1.8\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Write a query which will display name, department code and date of birth of all

students who were born between January 1, 1981 and March 31, 1983. Sort it based

on date of birth (ascending)

SELECT student\_code,dept\_code,student\_dob from student\_masters where student\_dob between '1-jan-81' and '31-mar-83'

**Lab 1.1.9\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Get the Department number, and sum of Salary of all non managers where the sum

is greater than 20000

SELECT dept\_code,SUM(staff\_sal) "sum of salary" FROM staff\_masters WHERE staff\_code

NOT IN(select distinct(mgr\_code) from staff\_masters) GROUP BY dept\_code HAVING SUM(staff\_sal)>20000

DEPT\_CODE sum of salary

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

10 29000

20 62000

30 49000

**Lab 1.1.10\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display the BOOK details that were published during the period of 2001 to 2004.

Also display book details with BOOK name having the character ‘/’ anywhere.

select \* from book\_masters WHERE book\_pub\_year BETWEEN 2001 AND 2004 AND BOOK\_NAME LIKE '%/%';

**Lab 1.1.11\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display the BOOK details where the record have the word ‘COMP’ anywhere in the BOOK Name.

SQL> select book\_name from book\_masters 2 WHERE book\_name LIKE '%Comp%';

**Lab 1.1.12\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

List the details of employee,whose names start with ‘A’ AND end with ‘S’ or

Whose names contains N as the second or third character and ending with either ‘N’ OR ‘S’;

select ename from emp where ename LIKE 'A%S' OR ename LIKE '\_N%'OR

ename LIKE'\_\_N%' OR ename LIKE '%N' OR ename LIKE '%S'

**Lab 1.1.13\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**List the name of employee having ‘\_’ in their name**

select ename from emp where ename LIKE '%\\_%' escape '\'

**LAB 2.1.1)\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display the Highest, Lowest, Total & Average salary of all staff. Label the columns Maximum, Minimum, Total and Average respectively. Round the result to nearest whole number

Ans:- select max(staff\_sal) "Highest",min(staff\_sal) "Lowest" , sum(staff\_sal) "Total",avg(staff\_sal)

Highest Lowest Total Average

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

32000 24000 56000 28000

62000 20000 124000 31000

42000 17000 91000 30333.3333

18000 18000 18000 18000

**Lab 2.1.2\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Write a query to display number of people in each Department. Output should display Department Code, Department Name and Number of People.

Ans:select s.dept\_code,d.dept\_name,count(\*) " Total No Of People" from staff\_masters s ,department\_masters d where s.dept\_code=d.dept\_code group by s.dept\_code,d.dept\_name

DEPT\_CODE DEPT\_NAME Total No Of People

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

10 Computer Science 2

20 Electricals 4

30 Electronics 3

40 Mechanics 1

**Lab-2.1.3\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Determine the number of managers without listing them in department . Label the column as ‘Total

Number of Managers’.

select deptno,count(distinct (mgr)) "Total Number Of Mgr" from emp group by deptno

DEPTNO Total Number Of Mgr

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

10 2

20 4

30 2

**Lab 2.1.4\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

select \* from emp o where sal=(select min(i.sal) from emp i where i.mgr=o.mgr group by i.mgr);

EMPNO ENAME JOB MGR HIREDATE SAL COMM DEPTNO

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

7369 SMITH CLERK 7902 17-DEC-80 800 20

7782 CLARK MANAGER 7839 09-JUN-81 2450 10

7788 SCOTT ANALYST 7566 19-APR-87 3000 20

7876 ADAMS CLERK 7788 23-MAY-87 1100 20

7900 JAMES CLERK 7698 03-DEC-81 950 30

7902 FORD ANALYST 7566 03-DEC-81 3000 20

7934 MILLER CLERK 7782 23-JAN-82 1300 10

7 rows selected.

**Lab 2.2.1 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display the details of Book that have not been returned and expected return date was last MONDAY. Book Name should be displayed in proper case

SELECT book.book\_code,book.book\_name, bt.book\_expected\_return\_date FROM

book\_masters book,book\_transactions bt WHERE book.book\_code=bt.book\_code

AND bt.book\_actual\_return\_date IS NULL AND NEXT\_DAY((SYSDATE-7),'Monday')=book\_expected\_return\_date;

**Lab 2.2.2\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Create a query which will display Staff Name, Salary of each staff. Format the salary

to be 15 character long and left padded with ‘$’.

SQL> select staff\_name,Lpad(staff\_sal,15,'$') from staff\_masters;

STAFF\_NAME LPAD(STAFF\_SAL,

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

Arvind $$$$$$$$$$17000

Shyam $$$$$$$$$$20000

Mohan $$$$$$$$$$24000

Anil $$$$$$$$$$20000

John $$$$$$$$$$32000

Allen $$$$$$$$$$42000

Smith $$$$$$$$$$62000

Raviraj $$$$$$$$$$18000

Rahul $$$$$$$$$$22000

Ram $$$$$$$$$$32000

10 rows selected.

**Lab 2.2.3\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display name and date of birth of students where date of birth must be displayed in

the format similar to “January, 12 1981” for those who were born on Saturday or

Sunday.

SELECT student\_name,to\_char(student\_dob,'month,dd,yyyy') from student\_masters where to\_char(student\_dob,'fmday') IN('saturday','sunday')

**Lab 2.2.4\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display each staff name and number of months they worked for the organization.

Label the column as ‘Months Worked’. Order your result by number of months

employed. Round the number of months to closest whole number.

select staff\_name,round(months\_between(sysdate,hiredate)) "Month Worked " from staff\_masters order by round(months\_between(sysdate,hiredate))

STAFF\_NAME Month Worked

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

Rahul 124

Arvind 135

Raviraj 135

Smith 145

Shyam 146

Mohan 147

Ram 147

Allen 156

Anil 157

John 159

10 rows selected.

**Lab 2.2.5\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

DISPLAY the name and salary of the staff.Salary should be represented as X.Each X represent a 1000 in Salary. EX.

JOHN 10000 XXXXXXXXXX

ALLEN 12000 XXXXXXXXXXXX

select staff\_name,staff\_sal,ROUND(staff\_sal/1000) "Round Sal" ,LPAD(' ,ROUND(staff\_sal/1000)+1,'\*') FROM staff\_masters;

**Lab 2.2.6\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

List the details of the employees who have joined in the first half of December (irrespective of the

year).

SQL> select \* from emp where to\_char(hiredate,'dd')<15 and to\_char(hiredate,'mon')='dec';

EMPNO ENAME JOB MGR HIREDATE SAL COMM DEPTNO

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

7900 JAMES CLERK 7698 03-DEC-81 950 30

7902 FORD ANALYST 7566 03-DEC-81 3000 20

**Lab 2.2.7\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Write a query that displays Staff Name, Salary, and Grade of all staff. Grade depends

on the following table.

**Salary Grade**

Salary >=50000 A

Salary >= 25000 < 50000 B

Salary>=10000 < 25000 C

OTHERS D

select staff\_name,staff\_sal ,case

when staff\_sal>=50000 then 'A'

when (staff\_sal>=25000) and (staff\_sal<50000) then 'B'

when (staff\_sal>=10000) and (staff\_sal<25000) then 'C'

else 'D'

end

from staff\_masters

STAFF\_NAME STAFF\_SAL C

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

Arvind 17000 C

Shyam 20000 C

Mohan 24000 C

Anil 20000 C

John 32000 B

Allen 42000 B

Smith 62000 A

Raviraj 18000 C

Rahul 22000 C

Ram 32000 B

10 rows selected.

**Lab 2.2.8\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display the Staff Name, Hire date and day of the week on which staff was hired. Label the column as DAY. Order the result by the day of the week starting with Monday.

SELECT staff\_name,hiredate,TO\_CHAR(hiredate,'day')"DAY"

FROM staff\_masters

ORDER BY TO\_CHAR(hiredate-1,'d') ;

**Lab 2.2.9\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Show staff names with the respective numbers of asterisk from Staff table except first

and last characters. For example: KING will be replaced with K\*\*G.

select ename , substr(ename,1,1) || Lpad('\*',length(ename)-2,'\*') || substr(ename,length(ename)-1,1) "paddings" from emp

**Lab 2.2.10\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display the Staff Name, Hire date and day of the week on which staff was hired. Order the result by the day of the week starting with Monday.

select staff\_name,hiredate,to\_char(hiredate,'day') from staff\_masters order by to\_char(hiredate,'d');

|  |  |  |
| --- | --- | --- |
| **STAFF\_NAME** | **HIREDATE** | **TO\_CHAR(H** |
| Shyam | 17-FEB-02 | sunday |
| Anil | 11-MAR-01 | sunday |
| John | 21-JAN-01 | sunday |
| Allen | 23-APR-01 | monday |
| Smith | 12-MAR-02 | tuesday |
| savita sharma | 12-AUG-14 | tuesday |
| Arvind | 15-JAN-03 | wednesday |
| Rahul | 11-DEC-03 | thursday |
| Ram | 17-JAN-02 | thursday |
| Hema G | 01-FEB-13 | friday |
| Mohan | 19-JAN-02 | saturday |
| Raviraj | 11-JAN-03 | saturday |

**Lab 2.2.11\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Write a query to find the position of third occurrence of ‘i’ in the given word‘Mississippi

select INSTR('MISSISSIPPI','I',1,4) from dual

**Lab 2.2.12\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Write a query to find the pay date for the month. Pay date is the last Friday of the

month. Display the date in the format “Twenty Eighth of January, 2002”. Label the

heading as PAY DATE.

select TO\_CHAR((NEXT\_DAY((last\_day(sysdate)-7),'Friday')),'ddsp Month,YYYY') " Pay Date" from dual;

**OR**

SELECT to\_char(next\_day((last\_day(sysdate)-7),'friday'),'ddspth') || 'of'||' '||

TO\_CHAR(next\_day((last\_day(sysdate)-7),'friday'),'month') ||','||

TO\_CHAR(next\_day((last\_day(sysdate)-7),'friday'),'yyyy') as "pay date"

FROM DUAL

pay date

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

twenty-seventhof june ,2014

**Lab 2.2.13\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display Student code, Name, Dept Name. Display “Electricles” if dept\_code=20,”Electronics” If Dept code=30 and Others” for all others Dept code in Dept Name columns.

SELECT student\_code,student\_name,

CASE

WHEN dept\_code=20 THEN 'Electricals'

WHEN dept\_code=30 THEN 'Electronics'

ELSE 'OTHERS'

END Dept\_Name

FROM student\_masters;

**Lab 2.2.14\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display the name and department code of students. If student does not belong to

any department, display “No Department”. Label the column as “Department”. (Hint:

Use NVL function)

SQL> SELECT student\_name,dept\_code,

CASE nvl(dept\_code,0) WHEN 0 then 'no department'

ELSE to\_char(dept\_code) end department

FROM student\_masters ;

STUDENT\_NAME DEPT\_CODE DEPARTMENT

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

Amit 10 10

Ravi 10 10

Ajay 20 20

Raj 30 30

Arvind 40 40

Rahul 50 50

Mehul 20 20

Dev 10 10

Vijay 30 30

Rajat 40 40

Sunder 50 50

Rajesh 30 30

Anil 20 20

Sunil 10 10

Kapil 40 40

Ashok 40 40

Ramesh 30 30

Amit Raj 50 50

Ravi Raj 50 50

Amrit 10 10

Sumit 20 20

Jenil no department

**\*\*\*JOINS and SUBQUERY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**Lab 3.1.1\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Write a query which displays Staff Name, Department Code, Department Name, and

Salary for all staff who earns more than 20000.

select s.staff\_name,s.dept\_code,d.dept\_name ,s.staff\_sal from staff\_masters s,department\_masters d where s.dept\_code=d.dept\_code and s.staff\_sal>20000

OR

SELECT staff\_name,dept\_code,dept\_name FROM staff\_masters

NATURAL JOIN department\_masters

WHERE staff\_sal>20000

STAFF\_NAME DEPT\_CODE DEPT\_NAME STAFF\_SAL

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

Mohan 10 Computer Science 24000

John 10 Computer Science 32000

Allen 30 Electronics 42000

Smith 20 Electricals 62000

Rahul 20 Electricals 22000

Ram 30 Electronics 32000

6 rows selected.

**Lab 3.1.2\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display Staff Code, Staff Name, Department Name, and his manager’s number and

name. Label the columns Staff#, Staff, Mgr#, Manager

SQL> select s.staff\_code, s.staff\_name, d.dept\_name, s.mgr\_code,mgr.staff\_name from staff\_masters s, department\_masters d,staff\_masters mgr where s.dept\_code=d.dept\_code and s.mgr\_code=mgr.staff\_code

STAFF\_CODE STAFF\_NAME DEPT\_NAME MGR\_CODE STAFF\_NAME

OR

SELECT staff\_code "STAFF#",staff\_name "staff",dept\_name "mgr#",

mgr\_code "manager"

FROM staff\_masters

NATURAL JOIN department\_masters

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

100001 Arvind Electronics 100006 Allen

00002 Shyam Electricals 100007 Smith

100003 Mohan Computer Science 100006 Allen

100004 Anil Electricals 100006 Allen

100005 John Computer Science 100007 Smith

100006 Allen Electronics 100005 John

100007 Smith Electricals 100005 John

100008 Raviraj Mechanics 100006 Allen

100009 Rahul Electricals 100006 Allen

100010 Ram Electronics 100007 Smith

10 rows selected.

SQL>

**Lab 3.1.3\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Create a query that will display Student Code, Student Name, Department Name,

Subjec1, Subject2, and Subject3 for all students who are getting 60 and above in

each subject from department 10 and 20.

select s.student\_code, s.student\_name, ss.student\_year, d.dept\_name, ss.subject1,ss.subject2,ss.subject3 from student\_masters s, department\_masters d, student\_marks ss where s.dept\_code=d.dept\_code and s.dept\_code in(10,20)and s.student\_code=ss.student\_code and ss.subject1>60 and ss.subject2>60 and ss.subject3 >60

OR

SELECT DISTINCT stu.student\_code, stu.student\_name,dept.dept\_name,sm.student\_year,

sm.subject1,sm.subject2,sm.subject3

FROM student\_masters stu

JOIN department\_masters dept

ON(dept.dept\_code=dept.dept\_code)

JOIN student\_marks sm

ON(stu.student\_code=sm.student\_code)

AND sm.subject1>=60

AND sm.subject2>=60

AND sm.subject3>=60

AND dept.dept\_code IN(10,20)

STUDENT\_CODE STUDENT\_NAME STUDENT\_YEAR DEPT\_NAME SUBJECT1SUBJECT2 SUBJECT3

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

1002 Ravi 2010 Computer Science 66 74 88

1014 Sunil 2010 Computer Science 73 74 65

1021 Sumit 2010 Electricals 78 79 78

1002 Ravi 2011 Computer Science 89 96 78

1007 Mehul 2011 Electricals 68 78 74

1013 Anil 2011 Electricals 66 74 88

1014 Sunil 2011 Computer Science 65 64 90

7 rows selected.

**Lab 3.1.4\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Create a query that will display Student Code, Student Name, Book Code, and Book

Name for all students whose expected book return date is today.

select s.student\_code,s.student\_name,b.book\_code,b.book\_name from student\_masters s,book\_masters b,book\_transactions bt where s.student\_code=bt.student\_code and b.book\_code=bt.book\_codeand bt.book\_expected\_return\_date=sysdate

no rows selected

**+++++++++++++++++++++++++++My table as follows++++++++++++++++**

**QL> select \* from book\_transactions;**

BOOK\_CODE STUDENT\_CODE STAFF\_CODE BOOK\_ISSU BOOK\_EXPE BOOK\_ACTU

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

10000006 1012 02-FEB-11 09-FEB-11

10000008 100006 10-MAR-11 17-MAR-11 15-MAR-11

10000009 100010 01-APR-11 08-APR-11 10-APR-11

10000004 1015 12-FEB-11 19-FEB-11

10000005 100007 14-MAR-11 21-MAR-11 21-MAR-11

10000007 100007 01-APR-11 07-APR-11 06-APR-11

10000007 100006 01-APR-10 07-APR-10 06-APR-10

10000005 1009 31-MAY-11 08-JUN-11 08-JUN-11

8 rows selected.

**Lab 3.1.5\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Create a query that will display Staff Code, Staff Name, Department Name,

Designation, Book Code, Book Name, and Issue Date. For only those staff who have

taken any book in last 30 days.

SELECT s.staff\_code,s.staff\_name,dept.dept\_name,design.design\_name,bt.book\_code,bm.book\_name,

bt.book\_issue\_date FROM staff\_masters s, book\_transactions bt,book\_masters bm,

department\_masters dept, designation\_masters design WHERE s.design\_code=design.design\_code

AND s.dept\_code=dept.dept\_code

AND s.staff\_code=bt.staff\_code

AND bt.book\_code=bm.book\_code

AND bt.book\_issue\_date BETWEEN TO\_CHAR(sysdate-30) AND TO\_CHAR(sysdate)

**Lab 3.1.6\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display the unique list of Book code and Book name from the book transaction.

SELECT DISTINCT trans.book\_code,book.book\_name

FROM book\_transactions trans,book\_transactions uniq,

book\_masters book

WHERE trans.book\_code=book.book\_code AND

trans.book\_code=uniq.book\_code ;

**Lab 3.1.7\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Generate a report which contains the following information.

Staff Code Staff Name Designation Department Name

Department Head

For all staff excluding HOD (List should not contain the details of Department head).

select s.staff\_code,s.staff\_name,s.mgr\_code, des.design\_name, dep.dept\_name from staff\_masters s,designation\_masters des,department\_masters dep where s.design\_code=des.design\_code and s.dept\_code=dep.dept\_code and des.design\_name!= 'HOD'

STAFF\_CODE STAFF\_NAME MGR\_CODE DESIGN\_NAME DEPT\_NAME

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

100001 Arvind 100006 Professor Electronics

100002 Shyam 100007 Professor Electricals

100003 Mohan 100006 Professor Computer Science

100004 Anil 100006 Professor Electricals

100005 John 100007 Director Computer Science

100006 Allen 100005 Reader Electronics

100007 Smith 100005 Reader Electricals

100008 Raviraj 100006 Professor Mechanics

100009 Rahul 100006 Professor Electricals

100010 Ram 100007 Reader **Electronics**

**Lab 3.1.8\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Generate a report which contains the following information

Student Code Student Name Department Name Total Marks

HOD Name

Sort the output on Department Name and Total Marks.

SELECT stud.student\_code,stud.student\_name,dept.dept\_name,

((mark.subject1+mark.subject2)+mark.subject3) as TOTALMARKS,hod.staff\_name as HOD

FROM student\_masters stud,student\_marks mark,department\_masters dept,

designation\_masters design,staff\_masters hod

WHERE stud.student\_code=mark.student\_code AND

stud.dept\_code=dept.dept\_code AND

hod.design\_code=design.design\_code AND

hod.dept\_code=dept.dept\_code AND

design.design\_name='HOD'

ORDER BY dept.dept\_name,TOTALMARKS;

**Lab 3.1.9\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Generate a report which contains the following information.

Staff Code, Staff Name, Designation, Department, Book Code, Book Name,

Author, Fine

For the staff who have not return the book. Fine will be calculated as Rs. 5 per day.

Fine = 5 \* (No. of days = Current Date – Expected return date).

SELECT staff.staff\_code, staff.staff\_name, des.design\_name, dep.dept\_name, book.book\_ code,book.book\_name , book.book\_pub\_author, (5\*(sysdate-bookt.book\_expected\_return\_date)) FROM staff\_masters staff, designation\_masters des, department\_masters dep,book\_masters book, book\_transactions bookt WHERE staff.design\_code = des.design\_code AND staff.dept\_code = dep.dept\_code AND book.book\_code = bookt.book\_code and staff.staff\_code =bookt.staff\_code AND bookt.book\_actual\_return\_date is null;

STAFF\_CODE STAFF\_NAME DESIGN\_NAME DEPT\_NAME BOO (5\*(SYSDATE-BOOKT.BOOK\_EXPECTED\_RETURN\_DATE))

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

100006 Allen Reader Electronics 10 563.366377

**Lab 3.1.10\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

List Staff Code, Staff Name, and Salary for those who are getting less than the

average salary of organization.

SELECT staff\_code,staff\_name,staff\_sal FROM staff\_masters WHERE staff\_sal<(SELECT AVG(staff\_sal) FROM staff\_masters);

**Lab 3.1.11\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

List the Staff Code, Staff Name who are not Manager.

select staff\_code,staff\_name from staff\_masters where staff\_code NOT IN

(select MGR\_CODE from staff\_masters WHERE STAFF\_CODE!=MGR\_CODE );

OR

SELECT staff\_code,staff\_name FROM staff\_masters staff WHERE NOT EXISTS

(SELECT DISTINCT mgr\_code FROM staff\_masters mgr WHERE mgr.mgr\_code=staff.staff\_code)/

TAFF\_CODE STAFF\_NAME

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

555 aaa

100001 Arvind

100002 Shyam

100003 Mohan

100004 Anil

100008 Raviraj

100009 Rahul

100010 Ram

8 rows selected.

**Lab 3.1.12\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display Author Name, Book Name for those authors who wrote more than one book.

SELECT book\_pub\_author,book\_name FROM book\_masters WHERE book\_pub\_author=(SELECT book\_pub\_author FROM book\_masters GROUP BY(book\_pub\_author) HAVING count(book\_name)>1);

**Lab 3.1.13\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display Staff Code, Staff Name, and Department Name for those who have taken

more than one book.

SELECT s.staff\_code,s.staff\_name,d.dept\_name FROM staff\_masters s,department\_masters d

WHERE s.dept\_code=d.dept\_code AND s.staff\_code=ANY(SELECT staff\_code

FROM book\_transactions GROUP BY staff\_code HAVING count(staff\_code)>1);

STAFF\_CODE STAFF\_NAME DEPT\_NAME

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

100006 Allen Electronics

100007 Smith Electricals

SQL> select \* from book\_transactions;

BOOK\_CODE STUDENT\_CODE STAFF\_CODE BOOK\_ISSU BOOK\_EXPE BOOK\_ACTU

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

10000008 100006 10-MAR-11 17-MAR-11 15-MAR-11

10000008 100006 10-MAR-11 17-MAR-11 15-MAR-11

10000009 100010 01-APR-11 08-APR-11 10-APR-11

10000004 1015 12-FEB-11 19-FEB-11

10000005 100007 14-MAR-11 21-MAR-11 21-MAR-11

10000007 100007 01-APR-11 07-APR-11 06-APR-11

10000007 100006 01-APR-10 07-APR-10 06-APR-10

10000005 1009 31-MAY-11 08-JUN-11 08-JUN-11

8 rows selected.

**Lab 3.1.14\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display top ten students for a specified department. Details are:

Student Code, Student Name, Department Name, Subject1, Subject2,

Subject3, Total.

SELECT sm.student\_code,sm.student\_name,

dm.dept\_name,

smr.subject1,smr.subject2,smr.subject3,

(smr.subject1+smr.subject2+smr.subject3) as "total"

FROM student\_masters sm,

department\_masters dm,

student\_marks smr

WHERE (sm.student\_code=smr.student\_code)

AND sm.dept\_code=dm.dept\_code

AND sm.dept\_code=20

AND rownum<=10

\* order by "total" desc

STUDENT\_CODE STUDENT\_NAME DEPT\_NAME SUBJECT1 SUBJECT2 SUBJECT3 total

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

1021 Sumit Electricals 78 79 78 235 1013 Anil Electricals 66 74 88 228

1007 Mehul Electricals 68 78 74 220

1003 Ajay Electricals 87 54 65 20 1021 Sumit Electricals 87 54 65 206

1013 Anil Electricals 75 58 65 198

1007 Mehul Electricals 67 79 49 195

1003 Ajay Electricals 78 56 55 189

8 rows selected.

**Lab 3.1.15 a) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

List Staff Code, Staff Name, Dept name and Salary for those who are getting less than the

average salary in their own department .

SELECT s.staff\_name,s.staff\_sal,d.dept\_name, d.dept\_code FROM staff\_masters s,department\_masters d WHERE s.dept\_code=d.dept\_code AND s.staff\_sal<ANY(SELECT AVG(st.staff\_sal) FROM staff\_masters st WHERE st.dept\_code=d.dept\_code);

OR

Display the Staff Name, Department Name, and Salary for those staff who are getting

less than average salary in their own department

select s.staff\_name,d.dept\_name,s.staff\_sal from staff\_masters s,department\_masters d

where s.staff\_sal<(select avg(staff\_sal) from staff\_masters

where s.dept\_code=d.dept\_code) group by d.dept\_name,s.staff\_name,s.staff\_sal;

STAFF\_NAME DEPT\_NAME STAFF\_SAL

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

Raviraj Mechanics 18000

Anil Electricals 20000

Rahul Electricals 22000

Shyam Electricals 20000

Arvind Electronics 17000

**b) List the details of the staff , experience (in years) whose desiganation are either professor or lecturer.**

SELECT s.staff\_name, TRUNC((sysdate-hiredate)/365)"Experience", d.design\_name FROM staff\_masters s,designation\_masters d WHERE s.design\_code=d.design\_code AND s.design\_code=ANY(SELECT d.design\_code FROM designation\_masters d WHERE d.design\_name IN('Professor','Lecturer'));

STAFF\_NAME Experience DESIGN\_NAME

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

Arvind 11 Professor

Rahul 10 Professor

Mohan 12 Professor

Raviraj 11 Professor

**Lab 3.1.16\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Create a query that will display the Staff Name, Department Name, and all the

staff who work in the same department as a given staff. Give the column as

appropriate label.

SELECT s.staff\_name,dep.dept\_name "Department Name"

FROM staff\_masters s,department\_masters dep

WHERE s.dept\_code=dep.dept\_code AND s.dept\_code=&DEPT\_CODE;

**Lab 3.1.17\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

List the Student Code, Student Name for that student who got highest marks in all

three subjects in Computer Science department for current year.

SELECT stud.student\_code,stud.student\_name

FROM student\_masters stud,student\_marks studmarks,department\_masters dept

WHERE stud.student\_code=studmarks.student\_code

AND stud.dept\_code=dept.dept\_code

AND dept.dept\_name='Computer Science'

AND studmarks.student\_year=&year

AND studmarks.subject1 =(SELECT MAX(subject1)

FROM student\_marks WHERE student\_year=studmarks.student\_year)

AND studmarks.subject2 =(SELECT MAX(subject2)

FROM student\_marks WHERE student\_year=studmarks.student\_year)

AND studmarks.subject3 =(SELECT MAX(subject3)

FROM student\_marks WHERE student\_year=studmarks.student\_year);

**Lab 3.1.18\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display the Student Code, Student Name, and Department Name for that

department in which there are maximum number of student are studying.

SQL> SELECT st.student\_code, st.student\_name,dept.dept\_name

FROM student\_masters st, department\_masters dept

WHERE st.dept\_code=dept.dept\_code AND st.dept\_code IN

(SELECT dept\_code FROM student\_masters

GROUP BY(dept\_code) HAVING count(dept\_code)=

(SELECT MAX(count(dept\_code)) FROM student\_masters

GROUP BY(dept\_code)));

STUDENT\_CODE STUDENT\_NAME DEPT\_NAME

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

1001 Amit IT

1002 Ravi IT

1014 Sunil IT

1020 Amrit IT

1008 Dev IT

**Lab 3.1.19\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Dislay staff\_code,staff\_name,dept\_name and designation masters for those who have joined in last 3 month.

SELECT s.staff\_code,s.staff\_name,d.dept\_name,des.design\_name FROM staff\_masters s,department\_masters d,designation\_masters des WHERE s.dept\_code=d.dept\_code

AND s.design\_code=des.design\_code AND s.staff\_code=ANY(SELECT ss.staff\_code FROM staff\_masters ss WHERE MONTHS\_BETWEEN(sysdate,ss.hiredate)<3)

**Lab 3.1.20\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Display the manager name and the total strength of his/her team.

SELECT staff\_name, strength

FROM (SELECT mgr\_code,COUNT(\*) strength FROM staff\_masters

3 GROUP BY mgr\_code) mgr,

4 staff\_masters staff

5 WHERE

6 mgr.mgr\_code=staff.staff\_code;

STAFF\_NAME STRENGTH

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

John 2

Allen 4

Smith 3

SELECT book.book\_code,book.book\_name, bt.book\_expected\_return\_date FROM book\_masters book,book\_transactions bt WHERE book.book\_code=bt.book\_code AND bt.book\_actual\_return\_date IS NULL

**Lab 4.1.1\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Create the Customer table with the following columns.

Customerid Number(5)

CustomerName Number(10)

Address1 Varchar2(30)

Address2 Varchar2(30)

CREATE TABLE vai\_customer(customerid NUMBER(5),cust\_name number(10) ,address1 VARCHAR2(30),Address2 VARCHAR2(30))

**LAB 4.1.2\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Modify the Customer table CustomerName column of datatype with Varchar2(30).

CustomerName should not accept Nulls.

ALTER TABLE vai\_customer rename column cust\_name to custname;

ALTER TABLE vai\_customer MODIFY custname varchar2(30) NOT NULL

**Lab 4.1.3\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Add the following Columns to the Customer table.

Gender Varchar2(1)

Age Number(3)

PhoneNo Number(10)

ALTER TABLE vai\_customer ADD (gender varchar2(1),age NUMBER(3),phoneno NUMBER(10))

**Lab 4.1.4\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

INSERT INTO vai\_customer VALUES(1000,'Allen','#115 Chicago','#115 Chicago','M',25,7878776);

INSERT INTO vai\_customer VALUES(1001,’George’, ‘#116 France’, ‘#116 France’, ‘M’, 25, 434524);

INSERT INTO vai\_customer VALUES(1002, ‘Becker’, ‘#114 New York’,’ #114 New York’, ‘M’, 45, 431525);

**Lab 4.1.5\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Add the Primary key constraint for Customerld with the name Custld\_Prim.

ALTER TABLE vai\_customer ADD CONSTRAINT custid\_prim PRIMARY KEY(customerid)

ORA-02437: cannot validate (USER1.CUSTID\_PRIM) - primary key violated

**Lab 4.1.6\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Insert the row given below in the Customer table and see the message generated bythe Oracle server.

INSERT INTO vai\_customer VALUES (1002, ‘John’,’ #114 Chicago’,’ #114 Chicago’, ‘M’, 45, 439525);

ORA-00001: unique constraint (USER1.CUSTID\_PRIM) violated

**Lab 4.1.7\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Disable the constraint on CustomerId, and insert the following data:

• 1002, Becker, #114 New York, #114 New york , M, 45, 431525

• 1003, Nanapatekar, #115 India, #115 India , M, 45, 431525

ALTER TABLE vai\_customer DISABLE CONSTRAINT custid\_prim;

INSERT INTO vai\_customer VALUES(1002, ‘Becker’,’ #114 New York’, ‘#114 New york’ , ‘M’, 45, 431525);

INSERT INTO vai\_customer VALUES(1003, ‘Nanapatekar’, ‘#115 India’, ‘#115 India’ , ‘M’, 45, 431525);

**Lab 4.1.8\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Enable the constraint on CustomerId of the Customer table, and see the message

generated by the Oracle server.

ALTER TABLE vai\_customer ENABLE CONSTRAINT custid\_prim;

**Lab 4.1.9\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Drop the constraint Custld\_Prim on CustomerId and insert the following Data. Alter

Customer table, drop constraint Custid\_Prim

alter table vai\_customer DROP CONSTRAINT custid\_prim;

Table altered.

**Lab 4.1.10\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Delete all the existing rows from Customer table, and let the structure remain itself

using TRUNCATE statement.

TRUNCATE TABLE vai\_customer;

**Lab 4.1.11\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

In the Customer table, add a column E\_mail.

ALTER TABLE vai\_customer ADD (email varchar2(30));

**Lab 4.1.12\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Drop the E\_mail column from Customer table

ALTER TABLE vai\_customer DROP COLUMN email ;

desc vai\_customer;

**Lab 4.1.13\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Add a new column EmailId to Customer table

ALTER TABLE vai\_customer ADD (emailid varchar2(30));

**Lab 4.1.14\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Mark EmailId column as unused before dropping it.

ALTER TABLE vai\_customer SET UNUSED COLUMN emailid;

**Lab 4.1.15\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Drop the unused EmailId column from the Customer table.

ALTER TABLE vai\_customer DROP UNUSED COLUMNS;

**Lab 4.1.16\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Define the COMMENT ‘Customers Details’ for Customer table.

COMMENT ON TABLE vai\_customer IS 'Customer Info In Details';

**Lab 4.1.17\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Use Data Dictionary USER\_TAB\_COMMENTS to view the created comment

select \* from USER\_TAB\_COMMENTS;

**Lab 4.1.18\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Define the COMMENT ‘Personal Contact no’ for the phoneno column of the

Customer table.

COMMENT ON COLUMN vai\_customer.phoneno IS 'Personal Contact Info';

**Lab 4.1.19\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Use Data Dictionary USER\_COL\_COMMENTS to view the created comment.

SELECT \* FROM USER\_COL\_COMMENTS;

**Lab 4.1.20\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Create the Suppliers table based on the structure of the Customer table. Include only

the CustomerId, CustomerName, Address1, Address2, and phoneno columns.

Name the columns in the new table as SuppID, SName, Addr1, Addr2, and

Contactno respectively

CREATE TABLE vai\_SUPPLIERS AS SELECT customerid,custname,address1,address2,phoneno FROM vai\_customer;

ALTER TABLE vai\_suppliers RENAME COLUMN custname to sname;

**Lab 4.1.21\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Drop the above table and recreate the following table with the name

CustomerMaster.

CustomerId Number(5) Primary key(Name of constraint is CustId\_PK)

CustomerName Varchar2(30) Not Null

Addressl Varchar2(30) Not Null

Address2 Varchar2(30)

Gender Varchar2(l)

Age Number(3)

PhoneNo Number(10)

CREATE TABLE Vai\_Customermaster (CustomerId Number(5) ,CustomerName Varchar2(30) Not Null,

Addressl Varchar2(30) Not Null,Address2 Varchar2(30),Gender Varchar2(1),Age Number(3),

PhoneNo Number(10),CONSTRAINT vai\_CustId\_PK PRIMARY KEY(CustomerId ));

**Lab 4.1.22\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Create the AccountsMaster table with the following Columns. Use sequence to

generate Account number

Customerld Number(5)

AccountNumber Number(10,2) Primary key(Name of constraint is

Acc\_PK)

AccountType Char(3)

LedgerBalance Number(10,2) Not Null

CREATE TABLE vai\_AccountMaster ( Customerld Number(5), AccountNumber Number(10,2) , AccountType Char(3),

LedgerBalance Number(10,2) Not Null, CONSTRAINT vai\_acc\_pk PRIMARY KEY(AccountNumber ));

**Lab 4.1.23\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**Relate vai\_AccountsMaster table and vai\_CustomerMaster table through Customerld column**

**with the constraint name Cust\_acc.**

ALTER TABLE vai\_AccountMaster ADD CONSTRAINT vai\_cust\_acc FOREIGN KEY(customerid) REFERENCES vai\_customermaster(customerid);

**Lab 4.1.24\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

INSERT INTO vai\_CustomerMaster VALUES(1000, 'Allen',' #115 Chicago',' #115 Chicago', 'M', 25, 7878776);

INSERT INTO vai\_CustomerMaster VALUES(1001, 'George', '#116 France',' #116 France', 'M', 25, 434524);

INSERT INTO vai\_CustomerMaster VALUES( 1002, 'Becker', '#114 New York', '#114 New York', 'M', 45, 431525);

commit;

**Lab 4.1.25\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Modify the AccountMaster table with the Check constraint to ensure AccountType should be either NRI or IND.

ALTER TABLE vai\_accountmaster

ADD CONSTRAINT vai\_chl\_con\_acc\_type

CHECK(accountnumber IN ('IND','NRI'));

desc vai\_accountmaster;

**Lab 4.1.26\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

insert into Accountsmaster values(1002,10001,'NRI',2500);

insert into Accountsmaster values(1002,12,'IND',2500);

insert into Accountsmaster values(1001,17,'IND',2500);

insert into Accountsmaster values(1001,31,'IND',2500);

insert into Accountsmaster values(1002,23,'IND',3500);

**Lab 4.1.27\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Modify the AccountsMaster table keeping a Check constraint with the name

Balance\_Check for the Minimum Balance which should be greater than 5000.

ALTER TABLE vai\_accountmaster ADD CONSTRAINT vai\_chk\_con\_bal CHECK ( ledgerbalance >5000);

**Lab 4.1.28\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Modify the AccountsMaster table such that if Customer is deleted from Customer

table then all his details should be deleted from AccountsMaster table.

ALTER TABLE vai\_AccountMaster ADD CONSTRAINT vai\_cust\_acc FOREIGN KEY(customerid) REFERENCES vai\_customermaster(customerid)

ON DELETE CASCADE;

**Lab 4.29\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

CREATE TABLE ACCOUNTTABLE AS SELECT \* from ACCOUNTMASTER

**Lab 4.30\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

RENAME ACCOUNTTABLE TO BACKUPTABLE;

**Lab 4.31\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

CREATE VIEW account\_view (customerCode,accountholdername,accountnumber,type,balance)

AS SELECT cust.customerid,cust.customername,acc.accountnumber,

acc.accounttype,acc.ledgerbalance from customermaster cust, accountmaster acc

**Lab 4.32\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

CREATE VIEW vAccs\_Dtls

(customerid,accountnumber,accounttype,ledgerbalance)

AS SELECT \* FROM Accountsmaster

WHERE accounttype='IND' AND ledgerbalance<10000;

**Lab 4.33\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

CREATE VIEW accsvw10 AS SELECT \* FROM Accountsmaster with read only;

View created.

INSERT INTO accsvw10 VALUES(1000,56,'NRI',9000);

ERROR at line 1:

ORA-42399: cannot perform a DML operation on a read-only view

**Lab 4.34 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

select staff\_code,staff\_name from (select staff\_code,staff\_name from staff\_masters where staff\_sal=(select max(staff\_sal) from staff\_masters ))

**Lab 4.1.35\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

List the top two highest earning employees in each department.

SELECT rnk,staff\_name,dept\_code,staff\_sal

FROM

(SELECT staff\_name,dept\_code,staff\_sal,RANK() over

(partition by dept\_code order by staff\_sal desc) as rnk

FROM staff\_masters)

WHERE rnk<=2

/

**Lab 4.1.40\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

CREATE UNIQUE INDEX vai\_no\_name ON dept(deptno,dname)**;**

**Lab 4.1.41\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

SELECT \* FROM USER\_IND\_COLUMNS;

**Lab 4.1.42\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

CREATE PUBLIC SYNONYM vai\_emp\_syn FOR emp;

NOTE:Privileges only for DBA

**Lab 4.1.43\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Get the information on synonyms synEmp from data dictionary

SELECT \* FROM USER\_SYNONYMS;

**Lab 4.1.44\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

CREATE OR REPLACE FORCE VIEW vai\_viewstaff AS SELECT \* FROM staff\_masters

**Lab 4.1.46\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

Create a Sequence with the name Seq\_Dept on Deptno column of Dept table. It

should start from 40 and stop at 200. Increment parameter for the sequence

Seq\_Dept should be in step of 10.

CREATE SEQUENCE vai\_dept\_seq INCREMENT BY 10 START WITH 40

MINVALUE 40 MAXVALUE 200;

**Lab 5.1\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

SELECT \* FROM previous\_products1

UNION

SELECT \* FROM current\_products1

PID NAME UNIT PRICE STOCK

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

1 Chang 24-12 oz bottels 19 17

3 Aniss, 12-550 ml bottels 10 13

5 Chef Anton"s Gumbo Mix 36 boxes 21 0

5 Chef Anton"s Gumbo mix 36 boxes 21 0

6 Grandma"s Boysenberry Spread 12-8 oz jars 25 120

6 Grandma"s BoysenberrySpread 12-8 oz jars 25 120

7 Uncle Bob"s Organic Dried Pears 12-1 lb pkgs. 30 15

8 Northenwoods Cranberry Sauce 12-12 oz jars 40 6

9 Mishi Kobe Niku 18-500g pkgs. 97 29

10 Ikura 12-200 ml jars 31 31

11 Queso cabrales 1kg pkg. 21 22

1 rows selected.

QL> SELECT \* FROM previous\_products1;

PID NAME UNIT PRICE STOCK

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

8 Northenwoods Cranberry Sauce 12-12 oz jars 40 6

1 Chang 24-12 oz bottels 19 17

3 Aniss, 12-550 ml bottels 10 13

6 Grandma"s BoysenberrySpread 12-8 oz jars 25 120

5 Chef Anton"s Gumbo mix 36 boxes 21 0

7 Uncle Bob"s Organic Dried Pears 12-1 lb pkgs. 30 15

8 Northenwoods Cranberry Sauce 12-12 oz jars 40 6

1 Chang 24-12 oz bottels 19 17

3 Aniss, 12-550 ml bottels 10 13

6 Grandma"s BoysenberrySpread 12-8 oz jars 25 120

5 Chef Anton"s Gumbo mix 36 boxes 21 0

7 Uncle Bob"s Organic Dried Pears 12-1 lb pkgs. 30 15

2 rows selected.

QL> SELECT \* FROM current\_products1;

PID NAME UNIT PRICE STOCK

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

7 Uncle Bob"s Organic Dried Pears 12-1 lb pkgs. 30 15

8 Northenwoods Cranberry Sauce 12-12 oz jars 40 6

9 Mishi Kobe Niku 18-500g pkgs. 97 29

10 Ikura 12-200 ml jars 31 31

11 Queso cabrales 1kg pkg. 21 22

5 Chef Anton"s Gumbo Mix 36 boxes 21 0

6 Grandma"s Boysenberry Spread 12-8 oz jars 25 120

7 rows selected.

**Lab 5.2\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

SELECT \* FROM previous\_products1

UNION ALL

SELECT \* FROM current\_products1

PID NAME UNIT PRICE STOCK

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

8 Northenwoods Cranberry Sauce 12-12 oz jars 40 6

1 Chang 24-12 oz bottels 19 17

3 Aniss, 12-550 ml bottels 10 13

6 Grandma"s BoysenberrySpread 12-8 oz jars 25 120

5 Chef Anton"s Gumbo mix 36 boxes 21 0

7 Uncle Bob"s Organic Dried Pears 12-1 lb pkgs. 30 15

8 Northenwoods Cranberry Sauce 12-12 oz jars 40 6

1 Chang 24-12 oz bottels 19 17

3 Aniss, 12-550 ml bottels 10 13

6 Grandma"s BoysenberrySpread 12-8 oz jars 25 120

5 Chef Anton"s Gumbo mix 36 boxes 21 0

7 Uncle Bob"s Organic Dried Pears 12-1 lb pkgs. 30 15

7 Uncle Bob"s Organic Dried Pears 12-1 lb pkgs. 30 15

8 Northenwoods Cranberry Sauce 12-12 oz jars 40 6

9 Mishi Kobe Niku 18-500g pkgs. 97 29

10 Ikura 12-200 ml jars 31 31

11 Queso cabrales 1kg pkg. 21 22

5 Chef Anton"s Gumbo Mix 36 boxes 21 0

6 Grandma"s Boysenberry Spread 12-8 oz jars 25 120

19 rows selected.

**Lab 5.3\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

SELECT \* FROM previous\_products1

INTERSECT

SELECT \* FROM current\_products1

PID NAME UNIT PRICE STOCK

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

7 Uncle Bob"s Organic Dried Pears 12-1 lb pkgs. 30 15

8 Northenwoods Cranberry Sauce 12-12 oz jars 40 6

**Lab 5.4\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

SELECT \* FROM previous\_products1

MINUS

SELECT \* FROM current\_products1

PID NAME UNIT PRICE STOCK

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

1 Chang 24-12 oz bottels 19 17

3 Aniss, 12-550 ml bottels 10 13

5 Chef Anton"s Gumbo mix 36 boxes 21 0

6 Grandma"s BoysenberrySpread 12-8 oz jars 25 120

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*SQL-99-JOIN On 3 Tables\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

SELECT \* from T1 Join T2 On C1 JOIN T3 On C2;