**QUIZ**

**Week #5 Subqueries**

**Problem 1:** Explain this query.

select stuid, name, stradr, city, state

from student

where stuid in

(select stuid

from registration

where majorcd in

(select majorcd

from major

where optioncd = 'PR' or optioncd = “NT'));

**Explanation:**

In this query we need the records with majorcd from major where optioncd = 'PR' or optioncd = “NT'. So first the inner most query is evaluated to get majorcd of required optioncd from table major.

After getting the majorcd the other subquery will get stuid from table registration which has same majorcd we got from the last query.

And at last all the records with those stuid will be displayed.

**Problem 2:**  select empno, ename, deptno, sal, job

2 from emp

3 where deptno in

4 (select deptno

5 from dept

6 where dname in ('RESEARCH','SALES'));

**Output:**

We will get all records from emp table with dept no. 20 or 30.

EMPNO ENAME JOB MGR HIREDATE SAL COMM

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DEPTNO

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7369 SMITH CLERK 7902 17-DEC-80 800

20

7499 ALLEN SALESMAN 7698 20-FEB-81 1600 300

30

7521 WARD SALESMAN 7698 22-FEB-81 1250 500

30

7566 JONES MANAGER 7839 02-APR-81 2975

20

7654 MARTIN SALESMAN 7698 28-SEP-81 1250 1400

30

7788 SCOTT ANALYST 7566 19-APR-87 3000

20

7844 TURNER SALESMAN 7698 08-SEP-81 1500 0

30

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

**Total 10 records displayed**

**Problem 3:** SQL> select substr(crsno,1,2), sum(enrolled)

2 from courseinfo

3 group by substr(crsno,1,2)

4 having sum(enrolled) >

5 (select avg(enrolled)

6 from courseinfo);

**Output:**

substr(crsno,1,2) sum(enrolled)

CI 103

BU 59

**Problem 4:** select name, yrgoal, contamt

from donor, donation

where donor.idno = donation.idno and contamt > yrgoal/12;

What output would be produced?

**Output:**

name yrgoal contamt

Jennifer Ames 400 40

Jennifer Ames 400 50

Susan Ash 50 20

Susan Ash 50 100

**4 records displayed**

**Problem 5:** SQL> select idno, driveno, contamt

from donation

where driveno > any

(select driveno

from drive

where lastyear > 5000);

**Output:**

Idno driveno contamt

12121 200 40

12121 300 50

23456 200 100

33333 300 10

**Problem 6:** SQL> select donor.idno, name, contamt, driveno

from donor, donation

where donor.idno = donation.idno and driveno > any

(select driveno

from drive where drivename = 'Animal Home');

**Output:**

Idno name contamt driveno

12121 Jennifer Ames 50 300

33333 Nancy Taylor 10 300

**Problem 7:** select driveno, sum(contamt)

2 from donation

3 group by driveno

4 having sum(contamt) > 50;

**Output:**

Driveno sum(contamt)

200 140

300 60

**Problem 8:**  select driveno, sum(contamt), avg(contamt)

2 from donation

3 where contamt > 10

4 group by driveno

5 having sum(contamt) > 45;

**Output:**

Driveno sum(contamt) avg(contamt)

200 140 70

300 50 25

**Problem 9:** select \*

from courseinfo

where &which > 25;

Enter value for which: **Enrolled**

**Output where enrolled > 25**

CRSN CRSNAME CAPACITY ENROLLED

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CI12 Oracle 30 27

CI17 PHP 32 32

Enter value for which: **capacity**

**Output where capacity > 25:**

CRSN CRSNAME CAPACITY ENROLLED

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CI05 C++ 30 20

CI07 VB 32 24

CI12 Oracle 30 27

CI17 PHP 32 32

BU10 Management 32 18

BU23 Accounting 30 21

**Problem 10:** SQL> select \*

2 from emp

3 order by &&which;

Explain what you would be prompted for and what you would enter if you want to order by job.

SQL> select empno, ename, job, sal

2 from emp

3 where &&which = &want

4 ;

Explain what you would be prompted for and what you would enter if you want to show everyone who is a CLERK

**Explanation:**

**First query:**

Enter value for **&&which**: JOB

**Second query:**

Here I will be prompted only for **&want** as &&which variable is a reusable variable.

Enter value for &want: CLERK