Q) SQL query to find the list of students who enrolled for Oracle course

Step 1: find the course id of oracle from Course table

select cid from courses where cname like 'oracle';

Step 2: fetch the list of students who enrolled for course id 1(1 is the oracle course id fetched from courses table – Step 1)

select \* from student1 where courseid=1;

Using Sub queries:

select \* from student1 where courseid=(select cid from courses where cname like 'oracle');

Q) SQL Query to find the classmates of S1.

Step 1: find the batchid of S1

select batchid from student1 where sname like 'S1';

Step 2: fetch the list of students who are attending the batch with code B7To8 (B7To9 is the output of Step 1)

select \* from student1 where batchid like 'B7to8';

Using Sub Queries:

select \* from student1 where batchid like (select batchid from student1 where sname like 'S1');

Types of Sub Queries

1. Single row sub query
2. Multi row sub query
3. Co related sub query

Single row sub query always returns a single value.

The above two are the examples for Single row sub query

Multi row sub query always returns more than one value.

We must use a special symbols in order the evaluate the main query.

IN, ALL, ANY, EXISTS are the special symbols we must use to evaluate the query

Q) SQL query to find the list of student who enrolled for Java and Oracle

select \* from student1 where courseid IN (select cid from courses where cname IN ('oracle','java'));

Q) SQL Query to find the list of employees whose salary is > either SMITH salary or ALLEN salary

In the above scenario we should fetch the employees information who are getting more than SMITH or ALLEN salary

Here we must be ANY special symbol

ANY means sal of an employee is > SMITH salary **OR** sal of an employee is > ALLEN salary

select empno,ename,job,sal from emp where sal > ANY (select sal from emp where ename IN ('SMITH','ALLEN'));

Q) SQL Query to find the list of employees whose salary is > SMITH salary and ALLEN salary

In the above scenario we should fetch the employees information who are getting more than SMITH and ALLEN salary

Here we must be ALL special symbol

ALL means sal of an employee is > SMITH salary **AND** sal of an employee is > ALLEN salary

select empno,ename,job,sal from emp where sal > ALL (select sal from emp where ename IN ('SMITH','ALLEN'));