Assignment

Sept23/ DBT/ 011

Database Technologies

Diploma in Advance Computing

September 2023

**Sub-queries with joins.**

USE ***student\_phone, student\_address, faculty\_phone, faculty\_address, batch\_students, course\_batches, student\_qualifications, faculty\_qualifications, course\_modules, modules, faculty, student, course, student\_cards, and student\_order*** relation to solve the following queries.

|  |
| --- |
| 1. Display all student who have taken admission in more than 2 batches. |
| select namefirst as Students from(select s.namefirst,count(\*) r1 from student s,batch\_students bs,course\_batches cb where s.id=bs.studentid and bs.batchid=cb.id group by s.namefirst) e where r1>2; |
|  |
| 1. Display the student detail who have joined the same batch of the student ‘saleel’. |
| select \* from student where id in(select studentid from batch\_students where batchid in (select batchid from batch\_students where studentid = (select id from student where namefirst='saleel'))); |
|  |
| 1. Display all courses where least number of students have taken the admission. |
|  |
|  |
| 1. Display student details who have not taken the admission. |
| select \* from student s where id not in(select distinct(studentid) from batch\_students); |
|  |
| 1. Get all courses where no modules are defined in course\_modules table. |
|  |
|  |
| 1. Display course*\_batches* details where student has taken the admission. |
|  |
|  |
| 1. Display all students whose marks of ‘BE’ is more than ‘ULKA’ marks in ‘BE’. |
|  |
|  |
| 1. Display all students whose marks are more than ‘saleel’ marks in 10th std. |
|  |
|  |
| 1. Display students whose DOB is as same as ‘kaushal’ |
|  |
|  |
| 1. Display all student details who have three or more phone numbers. |
| select \* from student s where id in(select studentid from student\_phone sp group by studentid having count(number)>=3); |
|  |
| 1. Display marks for the studentID 1 and 7 who have done ‘BE’. (Note: the marks must be displayed side by side). |
| select t1.marks as 'StudentID 1', t2.marks as 'Studentid 7' from (select marks from student\_qualifications where studentid = 1 and name='be') t1, (select marks from student\_qualifications where studentid = 7 and name = 'be') t2; |
| select s.id,sq.marks from student s join student\_qualifications sq on s.id = sq.studentid where studentid in(1,7)and name='BE' |
| 1. Display marks for the studentID 1 and 7 who have done ‘BE’ also fine out the difference of marks between them.   (Note: the marks and difference between the marks must be displayed side by side) |
| select t1.marks as 'StudentID 1', t2.marks as 'Studentid 7',t2.marks-t1.marks as difference from (select marks from student\_qualifications where studentid = 1 and name='be') t1, (select marks from student\_qualifications where studentid = 7 and name = 'be') t2; |
|  |
| 1. Display all student who are not joined any of the batch. |
|  |
|  |
| 1. Display all course\_batches details who are starting on the same day as ‘Batch1’. |
|  |
|  |
| 1. Display all students whose 10th marks is more than student ‘Neel’s 10th marks. |
|  |
|  |
| 1. Get all student with their qualification details who have highest marks in ‘BE’. |
|  |
|  |
| 1. Get all student with their qualification details who have second highest marks in ‘BE’. |
|  |
|  |
| 1. Display the student and student\_qualification details who have scored the maximum marks in ‘BE’ |
|  |
|  |
| 1. Display the student details who have scored the maximum marks in ‘BE’ |
|  |
|  |
| 1. Display the student details who have scored the minimum marks in ‘10’ std. |
| select namefirst, namelast from student where id = (select studentid from student\_qualifications where marks = (select min(marks) from student\_qualifications where name='10') and name = '10'); |
|  |
| 1. Display all student and student\_qualification details of those students who have scored marks more than ‘RAJAN’ in ‘BE’. |
| select \* from student where id in (select studentid from student\_qualifications where marks > (select marks from student\_qualifications where studentid = (select id from student where namefirst='rajan') and name ='be')and name = 'be'); |
| select s.id,namefirst, namelast, name, college, marks, year from student s join student\_qualifications sq where s.id = sq.studentid having marks > (select marks from student\_qualifications sq where studentid = (select id from student where namefirst = 'rajan') and sq.name = 'be') and sq.name = 'be'; |
| 1. Display all student who have done ‘BE’ in the same year as of studentID 16. |
| select \* from student where id in (select studentid from student\_qualifications where year = (select year from student\_qualifications where studentid = (select id from student where id = 16) and name = 'be') and name = 'be'); |
| select s.id,namefirst, namelast, name, college, university, marks, year from student s join student\_qualifications sq where s.id = sq.studentid having year = (select year from student\_qualifications where studentid = 16 and name = 'be') and name = 'be'; |
| 1. Display all odd records. |
| select \* from student where id in(select id from student where id % 2 != 0); |
| select s.namefirst,s.namelast,sq.name,sq.university from student s,student\_qualifications sq where s.id in(select s.id from student s where id % 2 = 1) and sq.name = 'be'; |
| 1. Calculate the sum of marks student wise of their qualifications (i.e. 10th, 12th and BE marks) |
| select studentid, sum(marks) from student\_qualifications group by(studentid); |
| select \* from student s,(select studentid, sum(marks) from student\_qualifications group by studentid)t where s.id = t.studentid; |
| 1. Display students’ details who are not having ***'Aadhaar'*** card. |
| select namefirst, namelast, dob, emailid from student where id in (select studentid from student\_cards where name= 'aadhaar'); |
| select \* from student s join student\_cards sc on s.id = sc.studentid where s.id in (select studentid from student\_cards where name = 'aadhaar') and name = 'aadhaar'; |