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.

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| 1. Display all student who have taken admission in more than 2 batches. |
| select \* from (select s.id, count(distinct cb.name) r1 from student s inner join batch\_students bs inner join course\_batches cb on s.id = bs.studentid and cb.id = bs.batchid group by s.id)e where r1>2; |
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| 1. Display the student detail who have joined the same batch of the student ‘saleel’. |
| select s.\* from student s inner join batch\_students bs on s.id = bs.studentid where bs.batchid in (select batchid from batch\_students where studentid = (select id from student where namefirst = 'saleel')); |
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| 1. Display all courses where least number of students have taken the admission. |
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| 1. Display student details who have not taken the admission. |
| select s.\* from student s where s.id not in (select s.id from student s inner join batch\_students bs where s.id = bs.studentid); |
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| 1. Get all courses where no modules are defined in course\_modules table. |
| select c.\* from course c where c.name not in (select distinct c.name from course c inner join course\_modules cm on c.id = cm.courseid); |
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| 1. Display course*\_batches* details where student has taken the admission. |
| select distinct cb.\* from course\_batches cb where cb.id in (select cb.id from batch\_students bs inner join course\_batches cb on bs.batchid = cb.id); |
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| 1. Display all students whose marks of ‘BE’ is more than ‘ULKA’ marks in ‘BE’. |
| select s.\*, sq.name, sq.marks from student s inner join student\_qualifications sq on s.id = sq.studentid where sq.name = 'be' and sq.marks>(select sq.marks from student\_qualifications sq inner join student s on sq.studentid = s.id where s.namefirst = 'ulka' and sq.name='be'); |
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| 1. Display all students whose marks are more than ‘saleel’ marks in 10th std. |
| select s.\* from student s inner join student\_qualifications sq on s.id = sq.studentid where sq.marks > (select marks from student\_qualifications where studentid = (select id from student where namefirst = 'saleel') and name = 10) and name = 10; |
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| 1. Display students whose DOB is as same as ‘kaushal’ |
| select namefirst from student where dob = (select dob from student where namefirst = 'kaushal'); |
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| 1. Display all student details who have three or more phone numbers. |
| select \* from student where id in (select studentid from student\_phone group by studentid having count(number) >= 3); |
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| 1. Display marks for the studentID 1 and 7 who have done ‘BE’. (Note: the marks must be displayed side by side). |
| select s1.marks as "studentid 1", s2.marks as "studentid 2" from ((select \* from student\_qualifications where studentid = 1 and name = 'be') s1 ,(select \* from student\_qualifications where studentid = 7 and name = 'be') s2 ); |
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| 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 s1.marks as "studentid 1", s2.marks as "studentid 2" from ((select \* from student\_qualifications where studentid = 1 and name = 'be') s1 ,(select \* from student\_qualifications where studentid = 7 and name = 'be') s2 ); |
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| 1. Display all student who are not joined any of the batch. |
| select \* from student where not exists (select true from batch\_students where student.id = batch\_students.studentid); |
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| 1. Display all course\_batches details who are starting on the same day as ‘Batch1’. |
| select \* from course\_batches where starton = (select starton from course\_batches where name = 'batch1') and name != 'batch1'; |
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| 1. Display all students whose 10th marks is more than student ‘Neel’s 10th marks. |
| 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 = 'neel') and name = 10) and name =10); |
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| 1. Get all student with their qualification details who have highest marks in ‘BE’. |
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| 1. Get all student with their qualification details who have second highest marks in ‘BE’. |
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| 1. Display the student and student\_qualification details who have scored the maximum marks in ‘BE’ |
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| 1. Display the student details who have scored the maximum marks in ‘BE’ |
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| 1. Display the student details who have scored the minimum marks in ‘10’ std. |
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| 1. Display all student and student\_qualification details of those students who have scored marks more than ‘RAJAN’ in ‘BE’. |
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| 1. Display all student who have done ‘BE’ in the same year as of studentID 16. |
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| 1. Display all odd records. |
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| 1. Calculate the sum of marks student wise of their qualifications (i.e. 10th, 12th and BE marks) |
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| 1. Display students’ details who are not having ***'Aadhaar'*** card. |
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