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 s1.namefirst from student s1 where s1.id in(select s.id from student s join batch\_students bs on s.id=bs.studentid group by s.id having count(s.id)>2);** |
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| 1. Display the student detail who have joined the same batch of the student ‘saleel’. |
| **select s.namefirst,cb.name from student s join batch\_students bs on s.id=bs.studentid join course\_batches cb on bs.batchid=cb.id where cb.name in( select cb.name from student s join batch\_students bs on s.id=bs.studentid join course\_batches cb on bs.batchid=cb.id where s.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 namefirst from student where namefirst not in (select s.namefirst from student s join batch\_students bs on s.id=bs.studentid);** |
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| 1. Get all courses where no modules are defined in course\_modules table. |
| **select c1.name from course c1 where c1.name not in(select distinct c.name from course c 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 \* from course\_batches where name in(select distinct cb.name from course\_batches cb join batch\_students bs on cb.id=bs.batchid);** |
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| 1. Display all students whose marks of ‘BE’ is more than ‘ULKA’ marks in ‘BE’. |
| **select s1.namefirst,s1.namelast,sq1.name,sq1.marks from student s1 join student\_qualifications sq1 on s1.id=sq1.studentid where sq1.name='be' and sq1.marks>(select sq.marks from student s join student\_qualifications sq on s.id=sq.studentid 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 s1.namefirst,s1.namelast,sq1.name,sq1.marks from student s1 join student\_qualifications sq1 on s1.id=sq1.studentid where sq1.name='10' and sq1.marks>(select sq.marks from student s join student\_qualifications sq on s.id=sq.studentid where s.namefirst='saleel' and sq.name='10');** |
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| 1. Display students whose DOB is as same as ‘kaushal’ |
| **select s1.namefirst,s1.dob from student s1 where s1.dob=(select s.dob from student s where s.namefirst='kaushal');** |
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| 1. Display all student details who have three or more phone numbers. |
| **select \* from student where namefirst in(select s.namefirst numberCount from student s join student\_phone sp on s.id=sp.studentid group by s.namefirst having count(s.namefirst)>=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 \* from (select sq1.marks as studentId1 from student\_qualifications sq1 where sq1.studentid=1 and sq1.name='be') studentId1,(select sq2.marks as studentId7 from student\_qualifications sq2 where sq2.studentid=7 and sq2.name='be') studenId2;** |
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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 (select sq1.marks as studentId1 from student\_qualifications sq1 where sq1.studentid=1 and sq1.name='be') studentId1,(select sq2.marks as studentId7 from student\_qualifications sq2 where sq2.studentid=7 and sq2.name='be') studenId2,(select sq3.marks as studentId1 from student\_qualifications sq3 where sq3.studentid=7 and sq3.name='be')-(select sq4.marks as studentId7 from student\_qualifications sq4 where sq4.studentid=1 and sq4.name='be') marksDifference;** |
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| 1. Display all student who are not joined any of the batch. |
| **select s.namefirst from student s where s.id not in(select bs.studentid from course\_batches cb join batch\_students bs on cb.id=bs.batchid**); |
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| 1. Display all course\_batches details who are starting on the same day as ‘Batch1’. |
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| 1. Display all students whose 10th marks is more than student ‘Neel’s 10th marks. |
| **select s1.namefirst,sq1.marks,sq1.name from student s1 join student\_qualifications sq1 on s1.id=sq1.studentid where sq1.name='10' and sq1.marks>(select sq.marks from student s join student\_qualifications sq on s.id=sq.studentid where s.namefirst='neel' and sq.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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