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.namefirst , count(cb.name) r from student s, course\_batches cb,batch\_students bs where s.id=bs.studentid and cb.id=bs.batchid group by s.namefirst)d where r>2; |
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| 1. Display the student detail who have joined the same batch of the student ‘saleel’. |
| select \*from( select s.namefirst, cb.name from student s, course\_batches cb, batch\_students bs where s.id=bs.studentid and cb.id=bs.batchid)e where name in (select cb.name from student s, course\_batches cb, batch\_students bs where s.id=bs.studentid and cb.id=bs.batchid and namefirst='saleel'); |
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| 1. Display all courses where least number of students have taken the admission. |
| select \*from (select name ,capacity cap from student s,batch\_students bs, course\_batches cb where s.id=bs.studentid and cb.id=bs.batchid) b where cap=(select min(capacity) from student s,batch\_students bs, course\_batches cb where s.id=bs.studentid and cb.id=bs.batchid) ; |
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| 1. Display student details who have not taken the admission. |
| select s.namefirst from student s where not exists(select sq.university from student s, student\_qualifications sq where s.id=sq.studentid); |
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| 1. Get all courses where no modules are defined in course\_modules table. |
| select c.name from course c where exists(select m.name from course c, course\_modules cm, modules m where c.id=cm.courseid and m.id= cm.moduleid); |
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| 1. Display course*\_batches* details where student has taken the admission. |
| select cb.name from course\_batches cb where exists(select m.name from course c, course\_modules cm, modules m where c.id=cm.courseid and m.id= cm.moduleid); |
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| 1. Display all students whose marks of ‘BE’ is more than ‘ULKA’ marks in ‘BE’. |
| select s.\* ,marks , name from student s, student\_qualifications sq where s.id =sq.studentid and marks>(select marks from student\_qualifications where id=(select id from student where namefirst ='ulka')) and name='be'; |
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| 1. Display all students whose marks are more than ‘saleel’ marks in 10th std. |
| select s.namefirst,sq.name,sq.marks from student s, student\_qualifications sq where s.id=sq.studentid and sq.name=10 and sq.marks>(select sq.marks from student s, student\_qualifications sq where s.id=sq.studentid and s.namefirst='saleel' and sq.name=10); |
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| 1. Display students whose DOB is as same as ‘kaushal’ |
| select s.namefirst, s.dob from student s where s.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 (select namefirst, count(number)n from student s, student\_phone sp where s.id=sp.studentid group by namefirst)a having n>=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 sq.marks as studentid1 from student s, student\_qualifications sq where s.id=sq.studentid and s.id=1 and sq.name='BE')a,(select sq.marks as studentid7 from student s, student\_qualifications sq where s.id=sq.studentid and s.id=7 and sq.name='BE')a1; |
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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 studentid1,studentid7, abs(studentid1-studentid7) Diff from(select sq.marks as studentid1 from student s, student\_qualifications sq where s.id=sq.studentid and s.id=1 and sq.name='BE')a,(select sq.marks as studentid7 from student s, student\_qualifications sq where s.id=sq.studentid and s.id=7 and sq.name='BE')a1; |
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| 1. Display all student who are not joined any of the batch. |
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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. |
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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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