Assignment

Sept23/ DBT/ 009

Database Technologies

Diploma in Advance Computing

September 2023

**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 and with their address* from *student* and *student\_address tables*. |
| select s1.namefirst , s1.namelast , s2.address from student s1, student\_address s2 where s1.id =s2.studentID; |
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| 1. Display *(namefirst, namelast, emailID, and student\_qualification details)* from *student* and student\_*qualification* relations. |
| select s1.namefirst , s1.namelast , s1.emailid , s2.name , s2.college, s2.university, s2.year,s2.marks from student s1 , student\_qualifications s2 where s1.id = s2.Studentid; |
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| 1. Display *(namefirst, namelast, emailID, college, and university)* who have studied in 'Yale University'. *(Use student, and student\_qualification relation)* |
| select s1.namefirst , s1.namelast , s1.emailid ,s2.name, s2.college, s2.university from student s1 , student\_qualifications s2 where s1.id = s2.Studentid and s2.university='yale university' ; |
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| 1. Display all student details his phone details and his qualification details. *(Use student, student\_phone and student\_qualification relation)* |
| select s1.namefirst , s2.number,s3.name from student s1 inner join student\_phone s2 on s1.id = s2.studentid inner join student\_qualifications s3 on s1.id = s3.studentid; |
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| 1. Display *(studentID, namefirst, namelast, name, college, university, and marks)* whose name is ‘BE’.*(Use student, and student\_qualification relation)* |
| select s1.id, s1.namefirst , s1.namelast , s2.name , s2.college , s2.university ,s2.marks from student s1 inner join student\_qualifications s2 on s1.id = s2.studentid where name='be'; |
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| 1. Display the module name and the duration of the module for the batch “Batch1”. |
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| 1. Display student information along with his batch details who have joined in “Batch1”. |
| select s1.\* , s2.\* from student s1 inner join batch\_students s2 on s1.id = s2.studentid where s2.batchid = 1; |
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| 1. Display module names for “PG-DAC” course. |
| select s1.name , s3.name from course s1 inner join course\_modules s2 on s1.id= s2.courseid inner join modules s3 on s3.id = s2.moduleid where s1.name = "pg-dac"; |
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| 1. Display *namefirst, namelast, and batch name for all students*. |
| select t3.namefirst , t3.namelast ,t1.name from course\_batches t1 inner join batch\_students t2 on t1.id = t2.batchid inner join student t3 on t3.id = t2.studentid; |
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| 1. Display *(namefirst, namelast, phone number, and emailid)* whose student ID is 13. |
| select distinct s1.namefirst , s1.namelast , s2.number, s1.emailid from student s1,student\_phone s2 where s1.id=s2.studentid and s2.studentid=13; |
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| 1. Display *(namefirst and count the total number of phones a student is having)* for all student. |
| select t1.namefirst , t2.r1 from student t1 inner join (select s1.id as r2, count(distinct(s2.number)) as r1 from student s1,student\_phone s2 where s1.id=s2.studentid group by (s1.id))as t2 on t1.id = t2.r2; |
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| 1. Get student’s *(namefirst, namelast, DOB, address, name, college, university, marks, and year)*. |
| select s1.namefirst , s1.namelast ,s1.emailid , s1.DOB, s2.address, s3.college, s3.university , s3.marks,s3.year from student as s1 inner join student\_address s2 on s1.id = s2.studentid inner join student\_qualifications s3 on s3.studentid = s1.id; |
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| 1. Get *(namefirst, namelast, emailID, phone number, and address)* whose faculty name is ‘ketan’. |
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| 1. Get*(course name and batch name)*for all courses. |
| select course.name, course\_batches.name from course inner join course\_batches on course.id = course\_batches.courseid; |
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| 1. Get all student details who have taken admission in ‘PG-DAC’ course. |
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| 1. Get all course details which had started on ‘2016-02-01’. |
| select \* from course\_batches cb inner join course c on c.id = cb.courseid inner join course\_modules cm on cm.courseid = cb.courseid inner join modules m on m.id = cm.moduleid where cb.starton ='2016-02-01'; |
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| 1. Get all course name and module names which are taught in ‘PG-DAC’ course. |
| select c.name , m.name from course c inner join course\_modules cm on cm.courseid = c.id inner join modules m on m.id = cm.moduleid where c.name = "PG-DAC" ; |
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| 1. Display how many modules are taught in each course. |
| select c.name,count(\*) from course c inner join course\_modules cm on cm.courseid = c.id inner join modules m on m.id = cm.moduleid group by c.name; |
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| 1. Display the student detail who are ‘BE’ graduate. |
| select s.\*,sq.\*,sa.\*,sp.\* from student s inner join student\_qualifications sq on s.id=sq.studentid inner join student\_address sa on s.id=sa.studentid inner join student\_phone sp on s.id=sp.studentid where sq.name="BE"; |
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| 1. Display all distinct course detail, where module for every course is designed. |
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| 1. Display studentID who have more than 2 phone numbers. |
| select s.id ,count(sp.number) from student s join student\_phone sp on s.id=sp.studentid group by sp.studentid having count(sp.number)>2; |
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| 1. Display the courses where ‘JAVA1’ is taught. |
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| 1. Display all student who have taken admission in 6 months course. |
| select s.id , c.duration from student s inner join batch\_students bs on s.id = bs.studentid inner join course\_batches cb on cb.id =bs.batchid inner join course c on c.id = cb.courseid where c.duration = 6; |
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| 1. Write a query to display the output in the following manner.   **'saleel', 'Aadhaar, Driving Licence, PAN, Voter ID, Passport, Debit, Credit'**  Arrange the data is ascending order of *nameFirst.* |
| select concat(s.namefirst ," " , group\_concat(sc.name)) details from student s join student\_cards sc on s.id=sc.studentid group by s.namefirst; |
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| 1. Write a query to display the output in the following manner.   **'ruhan', 'DBDA, PG-DAC, Pre-DAC'** |
| select s.namefirst,group\_concat(c.name) from student s join batch\_students bs on s.id=studentid join course\_batches cb on bs.batchid=cb.id join course c on c.id=cb.courseid group by s.namefirst; |
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