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 student.\*, address from student, student\_address; |
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| 1. Display *(namefirst, namelast, emailID, and student\_qualification details)* from *student* and student\_*qualification* relations. |
| select namefirst, namelast, emailID, name 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 namefirst, namelast, emailID, college, university from student s, student\_qualifications q where s.ID = q.studentID; |
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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 \* from student s,student\_phone sp,student\_qualifications sq where s.id=sp.studentid=sq.studentid; |
|  |
| 1. Display *(studentID, namefirst, namelast, name, college, university, and marks)* whose name is ‘BE’.*(Use student, and student\_qualification relation)* |
| select sq.studentid, s.namefirst, s.namelast, sq.name, sq.college, sq.university, sq.marks from student s, student\_qualifications sq where s.ID = sq.studentID and sq.name='be'; |
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| 1. Display the module name and the duration of the module for the batch “Batch1”. |
| select c.name, c.duration, cb.name from course c, course\_batches cb where cb.name='batch1'; |
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| 1. Display student information along with his batch details who have joined in “Batch1”. |
| select s.\*, bs.\* from student s, batch\_students bs where s.id=bs.studentid and batchid=1; |
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| 1. Display module names for “PG-DAC” course. |
| select modules.name, course.name from modules, course where modules.duration = course.duration and course.name="PG-DAC"; |
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| 1. Display *namefirst, namelast, and batch name for all students*. |
| select student.namefirst, student.namelast, course\_batches.name from student inner join batch\_students on student.ID = batch\_students.studentID inner join course\_batches on batch\_students.batchID = course\_batches.ID; |
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| 1. Display *(namefirst, namelast, phone number, and emailid)* whose student ID is 13. |
| select s.namefirst, s.namelast, s.emailID, p.number from student s inner join student\_phone p on s.ID = p.studentID where s.ID = 13; |
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| 1. Display *(namefirst and count the total number of phones a student is having)* for all student. |
| select s.namefirst, count(p.number) from student s inner join student\_phone p on s.ID = p.studentID group by s.namefirst; |
|  |
| 1. Get student’s *(namefirst, namelast, DOB, address, name, college, university, marks, and year)*. |
| select s.namefirst, s.namelast, s.DOB, a.address, q.name, q.college, q.university, q.marks, q.year from student\_address a inner join student s on a.studentID = s.ID inner join student\_qualifications q on s.ID = q.studentID; |
|  |
| 1. Get *(namefirst, namelast, emailID, phone number, and address)* whose faculty name is ‘ketan’. |
| select faculty.namefirst, faculty.namelast, faculty.emailID, faculty\_phone.number, faculty\_address.address from faculty inner join faculty\_phone on faculty.ID = faculty\_phone.facultyID inner join faculty\_address on faculty.ID = faculty\_address.facultyID; |
|  |
| 1. Get*(course name and batch name)*for all courses. |
| select c.name, b.name from course\_batches b inner join course c on b.courseID = c.ID; |
|  |
| 1. Get all student details who have taken admission in ‘PG-DAC’ course. |
| select s.namefirst, s.namelast, s.dob, s.emailid from student s inner join batch\_students b on s.id=b.studentid inner join course\_batches cb on b.batchid=cb.id inner join course c on cb.courseid=c.id where c.name='pg-dac'; |
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| 1. Get all course details which had started on ‘2016-02-01’. |
| select c.\*, cb.starton from course c inner join course\_batches cb on c.id=cb.courseid 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 modules m on c.duration=m.duration where c.name='pg-dac'; |
|  |
| 1. Display how many modules are taught in each course. |
| select c.name, count(m.name) no from course c inner join course\_modules cm on c.id=cm.courseid inner join modules m on m.id=cm.moduleid group by c.name; |
|  |
| 1. Display the student detail who are ‘BE’ graduate. |
| select \* from student s inner join student\_qualifications sq on s.id=sq.studentid where sq.name='be'; |
|  |
| 1. Display all distinct course detail, where module for every course is designed. |
| select distinct c.\* from course c inner join course\_modules cm on c.ID = cm.courseID inner join modules m on m.ID = cm.moduleID; |
|  |
| 1. Display studentID who have more than 2 phone numbers. |
| select sp.studentid, count(sp.number) from student s inner join student\_phone sp on s.id=sp.studentid group by sp.studentid having count(number)>2; |
|  |
| 1. Display the courses where ‘JAVA1’ is taught. |
| select c.name from course c inner join course\_modules cm on c.id=cm.courseid inner join modules m on m.id=cm.moduleid where m.name='java1'; |
|  |
| 1. Display all student who have taken admission in 6 months course. |
| select s.\* 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 s.namefirst, group\_concat(sc.name) from student s inner join student\_cards sc on s.id=sc.studentid group by s.namefirst order by namefirst asc; |
|  |
| 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 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 group by s.namefirst; |
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