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