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 s.\*, address from student s inner 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, sq.\* from student s inner join student\_qualifications sq on s.id = sq.studentid; |
|  |
| 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 join student\_qualifications sq on s.id = sq.studentid where 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 s.\*, number, isactive, sq.\* from student s join student\_phone sp join student\_qualifications sq on s.id = sq.studentid and s.id=sp.studentid; |
|  |
| 1. Display *(studentID, namefirst, namelast, name, college, university, and marks)* whose name is ‘BE’.*(Use student, and student\_qualification relation)* |
| select namefirst, namelast, sq.\* from student s join student\_qualifications sq on s.id = sq.studentid where sq.name = 'BE'; |
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| 1. Display the module name and the duration of the module for the batch “Batch1”. |
| Select m.name,m.duration from modules m join course\_modules cm join course\_batches cb on m.id= cm.moduleid and cm.courseid=cb.courseid where cb.name='Batch1'; |
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| 1. Display student information along with his batch details who have joined in “Batch1”. |
| select s.\*, cb.name from student s join batch\_students bs join course\_batches cb on s.id=bs.studentid and bs.batchid = cb.id where cb.name = 'batch1'; |
|  |
| 1. Display module names for “PG-DAC” course. |
| select m.name from course\_modules cm join course c join modules m on c.id = cm.courseid and m.id = cm.moduleid where c.name = 'PG-DAC'; |
|  |
| 1. Display *namefirst, namelast, and batch name for all students*. |
| select s.namefirst, s.namefirst, cb.name from student s join course\_batches cb join batch\_students bs on s.id = bs.studentid and cb.id = bs.batchid; |
|  |
| 1. Display *(namefirst, namelast, phone number, and emailid)* whose student ID is 13. |
| select s.namefirst, s.namelast, s.emailid, sp.number from student s j  oin student\_phone sp on s.id= sp.studentid; |
|  |
| 1. Display *(namefirst and count the total number of phones a student is having)* for all student. |
| select s.namefirst, count(sp.number) r1 from student s join student\_phone sp on s.id= sp.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, sa.address, sq.name, sq.college, sq.university, sq.marks, sq.year from student s join student\_address sa join student\_qualifications sq on s.id= sa.studentid and s.id = sq.studentid; |
|  |
| 1. Get *(namefirst, namelast, emailID, phone number, and address)* whose faculty name is ‘ketan’. |
| select s.namefirst, s.namelast, s.emailid, sp.number, sa.address from faculty s join faculty\_address sa join faculty\_phone sp on s.id= sa.facultyid and s.id = sp.facultyid where s.namefirst = 'ketan'; |
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| 1. Get*(course name and batch name)*for all courses. |
| select c.name, cb.name from course c join course\_batches cb on c.id = cb.courseid; |
|  |
| 1. Get all student details who have taken admission in ‘PG-DAC’ course. |
| select s.\* from student s join course c join course\_batches cb join batch\_students bs on s.id = bs.studentid and c.id = cb.courseid and cb.id = bs.batchid where c.name = 'PG-DAC'; |
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| 1. Get all course details which had started on ‘2016-02-01’. |
| select c.\* from course c join course\_batches cb on c.id = cb.courseid where cb.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 join modules m join course\_modules cm on c.id = cm.courseid and m.id = cm.moduleid where c.name = 'PG-DAC'; |
|  |
| 1. Display how many modules are taught in each course. |
| select c.name, count(m.name) from course c join modules m join course\_modules cm on c.id = cm.courseid and m.id = cm.moduleid group by c.name; |
|  |
| 1. Display the student detail who are ‘BE’ graduate. |
| select s.\* from student s 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 join course\_modules cm join modules m on c.id=cm.courseid and cm.moduleid = m.id ; |
|  |
| 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 s.id having count(sp.number) > 2; |
|  |
| 1. Display the courses where ‘JAVA1’ is taught. |
| select c.name from course c join course\_modules cm join modules m on c.id = cm.courseid and m.id = moduleid where m.name = 'JAVA1'; |
|  |
| 1. Display all student who have taken admission in 6 months course. |
| select s.\* from student s join course\_batches cb join batch\_students bs join course c on s.id = bs.studentid and c.id = cb.courseid and cb.id = bs.batchid 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 namefirst,group\_concat(sc.name) from student s join student\_cards sc on s.id=sc.studentid group by namefirst order by namefirst; |
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| 1. Write a query to display the output in the following manner.   **'ruhan', 'DBDA, PG-DAC, Pre-DAC'** |
| Select namefirst , group\_concat( c.name) from student s join batch\_students bs join course\_batches cb join course c on s.id=bs.studentid and cb.id=bs.batchid and cb.courseid=c.id group by namefirst order by namefirst; |
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