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 namefirst,address from student inner join student\_address on student.id=student\_address.id; |
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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 inner join student\_qualifications on student.id=student\_qualifications.id; |
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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 s.namefirst,s.namelast,s.emailid,sq.college,sq.university from student s join student\_qualifications sq on s.id=sq.studentid where sq.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 \* from student s join student\_phone sp on s.id=sp.studentid join student\_qualifications sq on s.id=sq.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 s.id,s.namefirst,s.namelast,sq.name,sq.college,sq.university,sq.marks from student s join student\_qualifications sq on s.id=sq.studentid; |
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| 1. Display the module name and the duration of the module for the batch “Batch1”. |
| select distinct m.name ,m.duration from course\_batches cb join course\_modules cm on cb.courseid=cm.courseid join modules m on m.id=cm.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.\*,bs.\* from student s join batch\_students bs on s.id=bs.studentid join course\_batches cb on cb.id=bs.batchid where cb.name='batch1'; |
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| 1. Display module names for “PG-DAC” course. |
| select c.name,group\_concat(m.name) from modules m join course\_modules cm on m.id=cm.moduleid join course c on c.id=cm.courseid where c.name='pg-dac' group by c.name; |
|  |
| 1. Display *namefirst, namelast, and batch name for all students*. |
| select s.namefirst,group\_concat(cb.name) from student s join batch\_students bs on s.id=bs.studentid join course\_batches cb on cb.id=bs.batchid group by s.namefirst; |
|  |
| 1. Display *(namefirst, namelast, phone number, and emailid)* whose student ID is 13. |
| select distinct(s.namefirst),s.namelast,s.emailid,sp.number from student s 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(s.namefirst) 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 distinct(s.namefirst),s.namelast,s.dob,sa.address from student s join student\_address sa on s.id=sa.studentid join student\_qualifications sq on s.id=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 join faculty\_phone fp on f.id=fp.facultyid join faculty\_address fa on f.id=fa.facultyid where f.namefirst='ketan';** |
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| 1. Get*(course name and batch name)*for all courses. |
| **select c.name,group\_concat(cb.name) from course c join course\_batches cb on c.id=cb.courseid group by c.name order by c.name desc;** |
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| 1. Get all student details who have taken admission in ‘PG-DAC’ course. |
| select s.\*,c.name from student s join batch\_students bs on s.id=bs.studentid join course\_batches cb on cb.id=bs.batchid join course c on c.id=cb.courseid 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 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 m.name from course c join course\_modules cm on c.id=cm.courseid 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, group\_concat(m.name) from course c join course\_modules cm on c.id=cm.courseid 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 \* 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. |
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| 1. Display studentID who have more than 2 phone numbers. |
| select s.id,count(s.id) countId from student s join student\_phone sp on s.id=sp.studentid group by s.id having count(s.id)>2; |
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| 1. Display the courses where ‘JAVA1’ is taught. |
| select c.id,c.name,m.name from course c join course\_modules cm on c.id=cm.courseid join modules m on cm.moduleid=m.id where m.name='java1'; |
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| 1. Display all student who have taken admission in 6 months course. |
| select s.namefirst,s.namelast from student s join batch\_students bs on s.id=bs.studentid join course\_batches cb on bs.batchid=cb.id 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 join student\_cards sc on s.id=sc.studentid group by s.namefirst order 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=bs.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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