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.\*, sa.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 distinct s.namefirst, s.namelast, s.emailid, sq.\* from student s inner join student\_qualifications sq on s.id = sq.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 s.namefirst, s.namelast, s.emailid, sq.college, sq.university from student s inner 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 s.\*, sp.number, sq.\* from student s inner join student\_phone sp on s.id = sp.studentid inner join student\_qualifications sq on sq.studentid=s.id;** |
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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 inner 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 distinct m.name, m.duration from modules m inner join course\_modules cm on m.id = cm.moduleid inner join course c on c.id = cm.courseid inner join course\_batches cb on c.id = cb.courseid where cb.name = 'batch1';** |
|  |
| 1. Display student information along with his batch details who have joined in “Batch1”. |
| **select distinct s.\*, cb.\* from student s inner join batch\_students bs on s.id = bs.studentid inner 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 m.name from modules m inner join course\_modules cm on m.id = cm.moduleid inner join course c on cm.courseid = c.id where c.name = 'pg-dac';** |
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| 1. Display *namefirst, namelast, and batch name for all students*. |
| **select s.\*, cb.name from student s inner join batch\_students bs on s.id = bs.studentid inner join course\_batches cb on cb.id = bs.batchid;** |
|  |
| 1. Display *(namefirst, namelast, phone number, and emailid)* whose student ID is 13. |
| **select distinct s.namefirst, s.namelast, sp.number, s.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 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 inner join student\_address sa on s.id = sa.studentid inner join student\_qualifications sq on s.id = sq.studentid;** |
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| 1. Get *(namefirst, namelast, emailID, phone number, and address)* whose faculty name is ‘ketan’. |
| **select f.namefirst, f.namelast, f.emailid, fp.number, fa.address from faculty f inner join faculty\_address fa on f.id = fa.facultyid inner join faculty\_phone fp on fp.facultyid = f.id where f.namefirst='ketan';** |
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| 1. Get*(course name and batch name)*for all courses. |
| **select c.name, cb.name from course c inner join course\_batches cb on c.id = cb.courseid;** |
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| 1. Get all student details who have taken admission in ‘PG-DAC’ 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.name = 'pg-dac' order by s.id;** |
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| 1. Get all course details which had started on ‘2016-02-01’. |
| **select c.\* 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 course\_modules cm on c.id = cm.courseid 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(m.name) 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;** |
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| 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';** |
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| 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;** |
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| 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;** |
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| 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';** |
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| 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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