Assignment

Sept23/ DBT/ 009

Database Technologies

Diploma in Advance Computing

September 2023

**Joins**

USE ***student\_phone, student\_address, faculty\_phone, faculty\_address, batch\_students,***

***, student\_qualifications, faculty\_qualifications, course\_modules, modules, faculty, student, course, course\_batches,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.ID,student.namefirst,student.namelast,student.DOB,student.emailid,student\_address.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 student.namefirst,student.namelast,student.emailid ,student\_qualifications.college,student\_qualifications.university,student\_qualifications.marks,student\_qualifications.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 student.namefirst,student.namelast,student.emailid,student\_qualifications.university,student\_qualifications.college from student inner join student\_qualifications on student.ID=student\_qualifications.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 student.ID,student.namefirst,student.namelast,student.DOB,student.emailid,student\_phone.number,student\_qualifications.college,student\_qualifications.university from student join student\_phone on student.id=student\_phone.studentid join student\_qualifications on student\_qualifications.studentid=student\_phone.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 student\_qualifications.studentid,student\_qualifications.name,student.namefirst,student.namelast,student\_qualifications.college,student\_qualifications.university,student\_qualifications.marks from student inner join student\_qualifications on student.id=student\_qualifications.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,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.\* from student s join course\_batches cb join batch\_students bs on s.id= bs.studentid and bs.batchid=cb.id where cb.name='Batch1'; |
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| 1. Display module names for “PG-DAC” course. |
| select course.id,course.name,course\_modules.courseid,modules.id,modules.name from course join course\_modules on course.id=course\_modules.courseid join modules on course\_modules.moduleid=modules.id where course.name='PG-dac' limit 9; |
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| 1. Display *namefirst, namelast, and batch name for all students*. |
| select student.namefirst,student.namelast,batch\_students.id,course\_batches.name from student join batch\_students on student.id=batch\_students.id join course\_batches on batch\_students.id=course\_batches.id; |
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| 1. Display *(namefirst, namelast, phone number, and emailid)* whose student ID is 13. |
| select student.namefirst,student.namelast,student.DOB,student.emailid,student\_phone.number from student inner join student\_phone on student.ID=student\_phone.id where student.id=13; |
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| 1. Display *(namefirst and count the total number of phones a student is having)* for all student. |
| Select namefirst, count(number) from student join student\_phone on student.id=student\_phone.studentid group by namefirst; |
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| 1. Get student’s *(namefirst, namelast, DOB, address, name, college, university, marks, and year)*. |
| select student.namefirst,student.namelast,student.DOB,student\_address.address,student\_qualifications.name,student\_qualifications.college,student\_qualifications.university,student\_qualifications.marks,student\_qualifications.year from student join student\_address on student.id=student\_address.id join student\_qualifications on student\_address.studentid=student\_qualifications.id ; |
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| 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 join faculty\_phone on faculty.id=faculty\_phone.facultyid join faculty\_address on faculty\_phone.facultyid=faculty\_address.facultyid where faculty.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 ; |
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| 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 cb.id=bs.batchid and 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 course.id,course.name,course.duration ,course.summery from course join course\_batches on course.id=course\_batches.courseid where course\_batches.starton ='2016-02-01'; |
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| 1. Get all course name and module names which are taught in ‘PG-DAC’ course. |
| select course.id,course.name,course\_modules.courseid,modules.id,modules.name from course join course\_modules on course.id=course\_modules.courseid join modules on course\_modules.moduleid=modules.id where course.name='PG-dac' limit 9; |
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| 1. Display how many modules are taught in each course. |
| select course.name,count(modules.name) from course join course\_modules on course.id=course\_modules.courseid join modules on course\_modules.moduleid=modules.id group by course.name; |
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| 1. Display the student detail who are ‘BE’ graduate. |
| select student.\*,student\_qualifications.name from student join student\_qualifications on student.id=student\_qualifications.studentid where student\_qualifications.name='BE';  select s.\*,sq.name from student s 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.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='node' or m.name='hive' or m.name='Python' or m.name='Aptitude' or m.name='oops with C++ Programming' or m.name='os concepts' or m.name='data structures' or m.name='ios programming'; |
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| 1. Display studentID who have more than 2 phone numbers. |
| select studentid,count(number) from student\_phone group by studentid having count(number)>2; |
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| 1. Display the courses where ‘JAVA1’ is taught. |
| select distinct 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 course.name,student.namefirst,student.namelast,student.DOB,student.emailid ,course.duration from student join course\_batches on student.id=course\_batches.courseid join course on course\_batches.id=course.id where course.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 student.namefirst,student\_cards.name,student\_cards.isActive from student join student\_cards on student.id=student\_cards.studentid order by student.namefirst asc; |
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| 1. Write a query to display the output in the following manner.   **'ruhan', 'DBDA, PG-DAC, Pre-DAC'** |
| select student.namefirst,course.name from student join course\_batches on student.id=course\_batches.courseid join course on course\_batches.courseid=course.id where course.name='PG-DAC'or course.name ='DBDA' or course.name= 'Pre-DAC' ; |
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