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 natural join student\_address; |
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| 1. Display *(namefirst, namelast, emailID, and student\_qualification details)* from *student* and student\_*qualification* relations. |
| select namefirst, namelast, emailID from student natural join student\_qualifications; |
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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, college, university from student natural join student\_qualifications 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 \* from student join student\_phone on student.id=student\_phone.studentid join student\_qualifications on student\_phone.studentid=student\_qualifications.studentid order by student.id; |
|  |
| 1. Display *(studentID, namefirst, namelast, name, college, university, and marks)* whose name is ‘BE’.*(Use student, and student\_qualification relation)* |
| select studentID, namefirst, namelast, name, college, university, marks from student natural join student\_qualifications where name='BE'; |
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| 1. Display the module name and the duration of the module for the batch “Batch1”. |
| select modules.name,modules.duration, course\_batches.name from modules join course\_batches where course\_batches.name='batch1'; |
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| 1. Display student information along with his batch details who have joined in “Batch1”. |
| select \* from student natural join batch\_students where batchid=1; |
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| 1. Display module names for “PG-DAC” course. |
| select \* from modules natural join course\_modules where courseid=1; |
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| 1. Display *namefirst, namelast, and batch name for all students*. |
| select namefirst, namelast, name from student inner join batch\_students on student.id=batch\_students.studentid inner join course\_batches on course\_batches.id=batch\_students.batchid; |
|  |
| 1. Display *(namefirst, namelast, phone number, and emailid)* whose student ID is 13. |
| select namefirst,namelast,number, emailid from student inner join student\_phone on student.id=student\_phone.studentid 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 distinct studentid , namefirst ,namelast,count(number) from student inner join student\_phone on student.id=student\_phone.studentid group by studentid; |
|  |
| 1. Get student’s *(namefirst, namelast, DOB, address, name, college, university, marks, and year)*. |
| select distinct namefirst, namelast, DOB, address, name, college, university, marks,year from student inner join student\_qualifications on student.id=student\_qualifications.studentid inner join student\_address on student.id=student\_address.studentid ; |
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| 1. Get *(namefirst, namelast, emailID, phone number, and address)* whose faculty name is ‘ketan’. |
| > select namefirst, namelast, emailID,number, address from faculty inner join faculty\_address on faculty.id=faculty\_address.facultyid inner join faculty\_phone on faculty.id=faculty\_phone.facultyid where namefirst='ketan'; |
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| 1. Get*(course name and batch name)*for all courses. |
| select course.name,course\_batches.name from course inner join course\_batches on course.id=course\_batches.courseid; |
|  |
| 1. Get all student details who have taken admission in ‘PG-DAC’ course. |
| select namefirst,namelast,DOB,emailid ,course.name from student join batch\_students on student.id=batch\_students.studentid join course\_batches on batch\_students.batchid=course\_batches.id join course on course.id=course\_batches.courseid where course.name='PG-DAC'; |
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| 1. Get all course details which had started on ‘2016-02-01’. |
| select \*from course inner join course\_batches on course.id=course\_batches.courseid where starton='2016-02-01'; |
|  |
| 1. Get all course name and module names which are taught in ‘PG-DAC’ course. |
| select course.name,modules.name from course join course\_modules on course.id=course\_modules.courseid join modules on modules.id=course\_modules.moduleid where course.name='PG-DAC'; |
|  |
| 1. Display how many modules are taught in each course. |
| select name ,count(moduleid) from course inner join course\_modules on course.id=course\_modules.courseid group by courseid; |
|  |
| 1. Display the student detail who are ‘BE’ graduate. |
| select \* from student natural join student\_qualifications where name='BE'; |
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| 1. Display all distinct course detail, where module for every course is designed. |
| select distinct course.name from course join course\_modules on course.id=course\_modules.courseid join modules on modules.id=course\_modules.moduleid; |
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| 1. Display studentID who have more than 2 phone numbers. |
| select distinct studentid from student\_phone group by studentid having count(number)>2; |
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| 1. Display the courses where ‘JAVA1’ is taught. |
| select \* from course inner join course\_modules on course.id=course\_modules.courseid where moduleid=7; |
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| 1. Display all student who have taken admission in 6 months course. |
| select \*from student inner join batch\_students on student.id=batch\_students.studentid inner join course\_batches on course\_batches.id=batch\_students.batchid where courseid in (1,2,6,7); |
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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 \* from student inner join student\_cards on student.id=student\_cards.studentid order by namefirst,name; |
|  |
| 1. Write a query to display the output in the following manner.   **'ruhan', 'DBDA, PG-DAC, Pre-DAC'** |
| SELECT CONCAT('\'', student.namefirst, ',', '\'',course.name , '\'') AS formatted\_output from student join batch\_students on student.id=batch\_students.studentid join course\_batches on batch\_students.batchid=course\_batches.id join course on course\_batches.courseid=course.id order by studentid; |
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