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.ID,concat(s.namefirst,' ',s.namelast)as Full\_Name,sa.address from student s INNER JOIN student\_address sa ON s.ID=sa.studentID; |
|  |
| 1. Display *(namefirst, namelast, emailID, and student\_qualification details)* from *student* and student\_*qualification* relations. |
| select s.namefirst, s.namelast, s.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 s.namefirst, s.namelast, s.emailID, sq.college, sq.university from student s INNER JOIN student\_qualifications sq ON s.ID=sq.studentID where university='Yale university'; |
|  |
| 1. Display all student details his phone details and his qualification details. *(Use student, student\_phone and student\_qualification relation)* |
| s.\*,sp.\*,sq.\* from student s INNER join student\_phone sp ON s.ID=sp.studentID INNER JOIN student\_qualifications sq ON s.ID=sq.studentID; |
|  |
| 1. Display *(studentID, namefirst, namelast, name, college, university, and marks)* whose name is ‘BE’.*(Use student, and student\_qualification relation)* |
| select s.namefirst, s.namelast, s.emailID,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'; |
|  |
| 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'; |
|  |
| 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'; |
|  |
| 1. Display module names for “PG-DAC” course. |
| select m.name from modules m join course\_modules cm join course c on m.id=cm.moduleid and cm.courseid=c.id where c.name='pg-dac'; |
|  |
| 1. Display *namefirst, namelast, and batch name for all students*. |
| select s.namefirst , s.namelast, cb.name from course\_batches cb INNER JOIN batch\_students bs on cb.id=bs.batchID INNER JOIN student s on s.id = bs.studentid; |
|  |
| 1. Display *(namefirst, namelast, phone number, and emailid)* whose student ID is 13. |
| select s.namefirst , s.namelast,sp.number, s.emailid from student s INNER JOIN 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(\*) from student s inner join student\_phone sp on s.id=sp.studentID group by 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 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,f.emailid ,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'; |
|  |
| 1. Get*(course name and batch name)*for all courses. |
| select c.name,group\_concat( cb.name) from course c join course\_batches cb group by c.name; |
|  |
| 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'; |
|  |
| 1. Get all course details which had started on ‘2016-02-01’. |
| select c.\*,cb.starton 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,group\_concat(m.name) from course c join modules m group by c.name having c.name='PG-DAC'; |
|  |
| 1. Display how many modules are taught in each course. |
| select c.name,group\_concat(m.name) from course c join modules m group by c.name ; |
|  |
| 1. Display the student detail who are ‘BE’ graduate. |
| select s.\*,sq.name 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.\*,group\_concat(m.name) as Modules from course c left outer join course\_modules cm on c.id=cm.courseid join modules m on cm.moduleid = m.id group by c.id; |
|  |
| 1. Display studentID who have more than 2 phone numbers. |
| select s.id,count(\*) from student s join student\_phone sp on s.id=sp.studentid group by s.id having count(\*)>2; |
|  |
| 1. Display the courses where ‘JAVA1’ is taught. |
| select \* from course c join course\_modules cm on c.id=cm.courseid join modules m on cm.moduleid=m.id where m.name='JAVA1'; |
|  |
| 1. Display all student who have taken admission in 6 months course. |
| select \* 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 cb.courseid=c.id 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 concat(s.namefirst,',',group\_concat(sc.name order by sc.name)) from student s join student\_cards sc on s.id=sc.studentid group by s.namefirst having s.namefirst='saleel'; |
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| 1. Write a query to display the output in the following manner.   **'ruhan', 'DBDA, PG-DAC, Pre-DAC'** |
| select concat( s.namefirst,',',group\_concat(c.name))concat 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 cb.courseid=c.id group by s.namefirst having s.namefirst='ruhan'; |
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