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 left join student\_address sa on s.id=sa.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.\* from student left 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 s.namefirst,s.namelast,s.emailid,sq.university,sq.college from student s left join student\_qualifications sq on s.id=sq.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 s.\*,sp.\*,sq.\* from student s join student\_phone sp on s.id=sp.studentid 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.id,s.namefirst,s.namelast,sq.college,sq.name,sq.university,sq.marks from student s left join student\_qualifications sq on s.id=sq.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\_batches c on m.id=c.id where c.name='batch1'; |
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| 1. Display student information along with his batch details who have joined in “Batch1”. |
| select s.\*,bs.batchid,cb.name from student s left join batch\_students bs on s.id=bs.studentid left join course\_batches cb on bs.batchid=cb.courseid where cb.name="batch1"; |
|  |
| 1. Display module names for “PG-DAC” course. |
| select c.name,cm.courseid,m.name from course c left join course\_modules cm on c.id=cm.courseid left join modules m on cm.moduleid=m.id where c.name="PG-DAC"; |
|  |
| 1. Display *namefirst, namelast, and batch name for all students*. |
| select s.namefirst,s.namelast,bs.batchid,cb.name from student s left join batch\_students bs on s.id=bs.studentid left join course\_batches cb on bs.studentid=cb.id ; |
|  |
| 1. Display *(namefirst, namelast, phone number, and emailid)* whose student ID is 13. |
| select s.namefirst,s.namelast,s.emailid,sp.number from student s left 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 left join student\_phone sp on s.id=sp.studentid group by s.namefirst having count(sp.number)>=1; |
|  |
| 1. Get student’s *(namefirst, namelast, DOB, address, name, college, university, marks, and year)*. |
| select s.\*,sq.name,sq.college,sq.university from student s left 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,fa.address,group\_concat(fp.number) 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" group by f.namefirst,f.namelast,fa.address; |
|  |
| 1. Get*(course name and batch name)*for all courses. |
| select c.name,group\_concat(cb.name) from course c left join course\_batches cb on c.id=cb.courseid group by c.name order by c.name desc; |
|  |
| 1. Get all student details who have taken admission in ‘PG-DAC’ course. |
| select distinct s.\*,c.name from student s left join batch\_students bs on s.id=bs.studentid left join course\_batches cb on bs.batchid=cb.id left join course c on cb.courseid=c.id where c.id=1; |
|  |
| 1. Get all course details which had started on ‘2016-02-01’. |
| select c.\*,cb.starton from course c left 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.\*,m.name from course c left join course\_modules cm on c.id=cm.courseid left join modules m on cm.moduleid=m.id where c.id=1; |
|  |
| 1. Display how many modules are taught in each course. |
| select c.name,count(m.name) from course c left join course\_modules cm on c.id=cm.courseid left 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 s.\*,sq.name from student s left join student\_qualifications sq on s.id=sq.studentid where name="BE"; |
|  |
| 1. Display all distinct course detail, where module for every course is designed. |
| select c.name,group\_concat(m.name) from course c left join course\_modules cm on c.id=cm.courseid left join modules m on m.id=cm.moduleid group by c.name order by c.name desc; |
|  |
| 1. Display studentID who have more than 2 phone numbers. |
| select s.id,s.namefirst,group\_concat(sp.number) from student s left join student\_phone sp on s.id=sp.studentid group by s.id,s.namefirst having count(s.id)>2; |
|  |
| 1. Display the courses where ‘JAVA1’ is taught. |
| select c.name,m.name from course c left join course\_modules cm on c.id=cm.courseid left 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 c.name,group\_concat(m.name) from course c left join course\_modules cm on c.id=cm.courseid left join modules m on cm.moduleid=m.id where c.duration=6 group by c.name; |
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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),"'") from student s left join student\_cards sc on s.id=sc.studentid group by s.namefirst order by s.namefirst; |
|  |
| 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),"'") from student s left join batch\_students bs on s.id=bs.studentid left join course\_batches cb on bs.batchid=cb.id left join course c on cb.courseid=c.id group by s.namefirst;++ |
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