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*. |
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| 1. Display *(namefirst, namelast, emailID, and student\_qualification details)* from *student* and student\_*qualification* relations. |
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| 1. Display *(namefirst, namelast, emailID, college, and university)* who have studied in 'Yale University'. *(Use student, and student\_qualification relation)* |
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| 1. Display all student details his phone details and his qualification details. *(Use student, student\_phone and student\_qualification relation)* |
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| 1. Display *(studentID, namefirst, namelast, name, college, university, and marks)* whose name is ‘BE’.*(Use student, and student\_qualification relation)* |
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| 1. Display the module name and the duration of the module for the batch “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 batch\_students bs join course\_batches cb on s.id=bs.studentid and cb.id=bs.batchid where cb.id=1 ; |
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| 1. Display module names for “PG-DAC” course. |
| select c.name,m.name,m.duration from course c join course\_modules cm join modules m on c.id=cm.courseid and cm.moduleid=m.id where c.name='PG-DAC'; |
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| 1. Display *namefirst, namelast, and batch name for all students*. |
| select s.namefirst,s.namelast,cb.name from student s join batch\_students bs join course\_batches cb on s.id=bs.studentid and bs.batchid=cb.id; |
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| 1. Display *(namefirst, namelast, phone number, and emailid)* whose student ID is 13. |
| select s.id, s.namefirst,s.namelast,sp.number,s.emailid from student s join student\_phone sp on s.id=sp.studentid where s.id=13 group by sp.number; |
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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(number) from student s inner join student\_phone sp on s.id = sp.studentid group by NAMEFIRST; |
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| 1. Get student’s *(namefirst, namelast, DOB, address, name, college, university, marks, and year)*. |
| Select s.id,namefirst,namelast,emailid,dob,sa.address,sq.name,sq.college,sq.university,sq.marks,sq.year from student s join student\_address sa join student\_qualifications sq on s.id=sa.studentid and s.id=sq.studentid; |
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| 1. Get *(namefirst, namelast, emailID, phone number, and address)* whose faculty name is ‘ketan’. |
| select group\_concat(fp.number) number, f.namefirst,f.namelast,f.emailid,fa.address from faculty f inner join faculty\_phone fp inner join faculty\_address fa on f.id=fp.facultyid=fa.facultyid where f.namefirst='ketan' group by f.namefirst,f.namelast,f.emailid,fa.address ; |
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| 1. Get*(course name and batch name)*for all courses. |
| select c.id,c.name,group\_concat(cb.name) batches from course c join course\_batches cb on c.id=cb.courseid group by c.id, c.name; |
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| 1. Get all student details who have taken admission in ‘PG-DAC’ course. |
| select s.\*, c.name,cb.name from student s join batch\_students bs join course\_batches cb join course c on s.id=bs.studentid and bs.batchid=cb.id and cb.courseid=c.id where c.name='pg-dac'; |
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| 1. Get all course details which had started on ‘2016-02-01’. |
| select c.name,cb.name,cb.courseid,cb.starton from course c 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,m.duration from course c join course\_modules cm join modules m on c.id=cm.courseid and cm.moduleid=m.id where c.name='PG-DAC'; |
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| 1. Display how many modules are taught in each course. |
| select c.id, c.name courses ,group\_concat(m.name) modules,count(m.name) count\_of\_modules from course c join course\_modules cm join modules m on c.id=cm.courseid and m.id=cm.moduleid group by c.id ; |
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| 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'; |
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| 1. Display all distinct course detail, where module for every course is designed. |
| select c.id, c.name courses ,group\_concat(m.name) modules from course c join course\_modules cm join modules m on c.id=cm.courseid and m.id=cm.moduleid group by c.id ; |
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| 1. Display studentID who have more than 2 phone numbers. |
| select s.id, group\_concat(sp.number), count(sp.number)from student s join student\_phone sp on s.id=sp.studentid group by s.id having count(sp.number)>2; |
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| 1. Display the courses where ‘JAVA1’ is taught. |
| select c.name,m.name from course c join course\_modules cm join modules m on c.id=cm.courseid and m.id=cm.moduleid where cm.moduleid=7; |
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| 1. Display all student who have taken admission in 6 months course. |
| select s.id,namefirst,namelast,c.name,c.duration 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.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.id, s.namefirst, group\_concat(sc.name) from student s join student\_cards sc on s.id=sc.studentid group by s.id order by namefirst; |
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| 1. Write a query to display the output in the following manner.   **'ruhan', 'DBDA, PG-DAC, Pre-DAC'** |
| select s.id,s.namefirst,group\_concat(c.name) courses from student s join batch\_students bs join course\_batches cb join course c on s.id=bs.studentid and cb.id=bs.batchid and c.id=cb.courseid group by s.id ; |
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