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 e.id ,s.address from student e , student\_address s where e.id= s.studentid; |
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| 1. Display *(namefirst, namelast, emailID, and student\_qualification details)* from *student* and student\_*qualification* relations. |
| select \* from student s join student\_qualifications e on s.id=e.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, e.college, e.university from student s, student\_qualifications e where s.id=e.studentid and 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 r,student\_phone q,student\_qualifications p where r.id=q.studentid=p.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 r.id,namefirst,namelast,name,college,university,marks from student r,student\_qualifications p where r.id=p.studentid and name="be"; |
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| 1. Display the module name and the duration of the module for the batch “Batch1”. |
| select m.name, duration from modules m,course\_batches c where m.id=c.courseid and c.name="batch1"; |
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| 1. Display student information along with his batch details who have joined in “Batch1”. |
| select namefirst, namelast, dob, emailid from student s, course\_batches c where s.id=c.courseid and c.name="batch1"; |
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| 1. Display module names for “PG-DAC” course. |
| select modules.name from modules,course\_modules where modules.id=course\_modules.moduleid and course\_modules.courseid=1; |
|  |
| 1. Display *namefirst, namelast, and batch name for all students*. |
| select a.namefirst,a.namelast,b.batchid, c.name from student a join batch\_students b on a.id=b.studentid join course\_batches c on c.id=b.batchid ; |
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| 1. Display *(namefirst, namelast, phone number, and emailid)* whose student ID is 13. |
| select a.namefirst,a.namelast, b.number,a.emailid from student a inner join student\_phone b where a.id= b.studentid and b.studentid=13; |
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| 1. Display *(namefirst and count the total number of phones a student is having)* for all student. |
| select a.namefirst,a.namelast, count(b.number) from student a inner join student\_phone b on a.id= b.studentid group by studentid; |
|  |
| 1. Get student’s *(namefirst, namelast, DOB, address, name, college, university, marks, and year)*. |
| select s.\*,a.address,b.name,b.college,b.university,b.marks,b.year from student s join student\_address a on s.id= a.studentid join student\_qualifications b on s.id=b.studentid; |
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| 1. Get *(namefirst, namelast, emailID, phone number, and address)* whose faculty name is ‘ketan’. |
| select f.namefirst, f.namelast,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 and f.namefirst='ketan'; |
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| 1. Get*(course name and batch name)*for all courses. |
| select c.name,b.name from course c join course\_batches b where c.id=b.courseid; |
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| 1. Get all student details who have taken admission in ‘PG-DAC’ course. |
| select s.\* from student s join batch\_students b where s.id=b.studentid and batchid=1; |
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| 1. Get all course details which had started on ‘2016-02-01’. |
| select c.\* from course c join course\_batches b where c.id=b.courseid and 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.name,modules.name from course inner join course\_modules on course.id=course\_modules.courseid inner join modules on modules.id=course\_modules.moduleid and course.name='pg-dac'; |
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| 1. Display how many modules are taught in each course. |
| select c.name,count(cm.moduleid) from course c inner join course\_modules cm on c.id=cm.courseid group by cm.courseid; |
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| 1. Display the student detail who are ‘BE’ graduate. |
| select s.\* from student s join student\_qualifications sq where s.id=sq.studentid and sq.name='be'; |
|  |
| 1. Display all distinct course detail, where module for every course is designed. |
| select course.name, group\_concat(modules.name) from course inner join course\_modules on course.id=course\_modules.courseid inner join modules on modules.id=course\_modules.moduleid group by course.name ; |
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| 1. Display studentID who have more than 2 phone numbers. |
| select s.id ,count(sp.number) from student s join student\_phone sp on s.id=sp.studentid group by sp.studentid having count(sp.number)>2; |
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| 1. Display the courses where ‘JAVA1’ is taught. |
| select course.name,modules.name from course inner join course\_modules on course.id=course\_modules.courseid inner join modules on modules.id=course\_modules.moduleid having modules.name='java1' ; |
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| 1. Display all student who have taken admission in 6 months course. |
| select distinct(s.id),c.duration from student s join batch\_students bs on s.id=studentid join course\_batches cb on bs.batchid=cb.id join course c on c.id=cb.courseid having 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)) details from student s join student\_cards sc on s.id=sc.studentid group by s.namefirst; |
|  |
| 1. Write a query to display the output in the following manner.   **'ruhan', 'DBDA, PG-DAC, Pre-DAC'** |
| select s.namefirst,group\_concat(c.name) from student s join batch\_students bs on s.id=studentid join course\_batches cb on bs.batchid=cb.id join course c on c.id=cb.courseid group by s.namefirst; |
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