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