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 studentID,namefirst,address from student,student\_address where student.id=student\_address.id; |
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| 1. Display *(namefirst, namelast, emailID, and student\_qualification details)* from *student* and student\_*qualification* relations. |
| select studentID,namefirst,namelast, emailID,student\_qualifications.\* from student,student\_qualifications where student.id=student\_qualifications.id; |
|  |
| 1. Display *(namefirst, namelast, emailID, college, and university)* who have studied in 'Yale University'. *(Use student, and student\_qualification relation)* |
| select \* from student inner join student\_qualifications using(ID) where university = 'Yale University'; |
|  |
| 1. Display all student details his phone details and his qualification details. *(Use student, student\_phone and student\_qualification relation)* |
| select distinct s.namefirst,group\_concat(distinct p.number),group\_concat(distinct q.name) from student s,student\_qualifications q,student\_phone p where s.id=q.studentid and s.id=p.studentid group by namefirst;  select distinct \* from student s,student\_qualifications q,student\_phone p where s.id=q.studentid and s.id=p.studentid; |
|  |
| 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 inner join student\_qualifications on student.id=student\_qualifications.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.courseid where c.name='batch1'; |
|  |
| 1. Display student information along with his batch details who have joined in “Batch1”. |
| .  select namefirst from student,course\_batches where student.id=course\_batches.id and name='batch1';  select s.\* ,cb.\* from student s join course\_batches cb join batch\_students bs on s.id=bs.studentid and cb.id=bs.batchid where cb.name= Batch1 ; |
|  |
| 1. Display module names for “PG-DAC” course. |
| --- 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 c.name='pg-dac';  --- select distinct c.name,group\_concat(m.name) 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' group by c.name; |
|  |
| 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 where s.id =bs.studentid=cb.courseid group by s.namefirst,s.namelast,cb.name;  ---- select s.namefirst,s.namelast,group\_concat(cb.name) from student s join batch\_students bs join course\_batches cb where s.id =bs.studentid and bs.batchid=cb.courseid group by s.namefirst,s.namelast; |
|  |
| 1. Display *(namefirst, namelast, phone number, and emailid)* whose student ID is 13. |
| select s.namefirst,s.namelast,p.number,s.emailid from student s join student\_phone p on s.id=p.studentid where s.id=13; |
|  |
| 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 s.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,student\_address sa,student\_qualifications sq where s.id=sa.studentid and 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,faculty\_address fa,faculty\_phone fp where f.id=fp.facultyid=fa.facultyid and f.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 on c.id=cb.courseid; |
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| 1. Get all student details who have taken admission in ‘PG-DAC’ course. |
| select s.\* ,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 and c.name='pg-dac'; |
|  |
| 1. Get all course details which had started on ‘2016-02-01’. |
| select c.\*,cb.starton from course c,course\_BATCHES CB WHERE C.ID=CB.COURSEID AND 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 ,modules m,course\_modules cm where c.id=cm.courseid and m.id=cm.moduleid and c.name='pg-dac' group by c.name; |
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| 1. Display how many modules are taught in each course. |
| select c.name ,count(\*) from course c,modules m,course\_modules cm where c.id=cm.courseid and m.id=cm.moduleid group by c.name;  select c.name ,count(m.name) from course c,modules m,course\_modules cm where c.id=cm.courseid and m.id=cm.moduleid group by c.name; |
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| 1. Display the student detail who are ‘BE’ graduate. |
| select s.\*,sq.name from student s,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 c.name,c.duration,c.summery, group\_concat(m.name) from course c ,modules m,course\_modules cm where c.id=cm.courseid and m.id=cm.moduleid group by c.name,c.duration,c.summery; |
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| 1. Display studentID who have more than 2 phone numbers. |
| select distinct s.namefirst,group\_concat(distinct p.number) from student s,student\_phone p where s.id=p.studentid group by namefirst having count(\*)>2; |
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| 1. Display the courses where ‘JAVA1’ is taught. |
| select c.name,m.name from course c ,modules m,course\_modules cm where c.id=cm.courseid and m.id=cm.moduleid and m.name='java1' group by c.name; |
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| 1. Display all student who have taken admission in 6 months course. |
| Select s.namefirst,s.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 duration=6;  Select group\_concat(s.namefirst),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 duration=6 group by c.duration,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 s.namefirst,group\_concat(sc.name) from student s,student\_cards sc where s.id=sc.studentid group by s.namefirst order by 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 join course\_batches cb join course c on s.id=bs.studentid and c.id=cb.courseid and cb.id=bs.batchid group by namefirst; |
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