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 student.id, namefirst, namelast, address from student, student\_address where student.id = student\_address.studentid; |
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| 1. Display *(namefirst, namelast, emailID, and student\_qualification details)* from *student* and student\_*qualification* relations. |
| select namefirst, namelast , emailid, sq.\* from student s, student\_qualifications sq where s.id = sq.studentid; |
|  |
| 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.studentid; |
|  |
| 1. Display all student details his phone details and his qualification details. *(Use student, student\_phone and student\_qualification relation)* |
| select s.\*, number,isActive,name, college, university, marks, year from student s, student\_phone sp, student\_qualifications sq where sq.studentid = sp.studentid and 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 sq.studentid, namefirst, namelast, name, college, university, marks, year from student s,student\_qualifications sq where s.id = sq.studentid and sq.name = 'BE'; |
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| 1. Display the module name and the duration of the module for the batch “Batch1”. |
| select cb.name batch\_name, m.name module\_name, duration from modules m, course\_batches cb where m.id = courseid and cb.name = 'Batch1'; |
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| 1. Display student information along with his batch details who have joined in “Batch1”. |
| select batchid, namefirst, namelast from student s , batch\_students bs where s.id=bs.studentid and batchid=1; |
|  |
| 1. Display module names for “PG-DAC” course. |
| select row\_number() over() Sr\_no, m.name from course c,modules m,course\_modules where c.id=courseid and m.id=moduleid and courseid=1; |
|  |
| 1. Display *namefirst, namelast, and batch name for all students*. |
| select namefirst, namelast ,cb.name batch\_name from student s, course\_batches cb, batch\_students where s.id=studentid and batchid=cb.id; |
|  |
| 1. Display *(namefirst, namelast, phone number, and emailid)* whose student ID is 13. |
| select namefirst,namelast,number,emailid from student s,student\_phone where s.id=studentid and studentid=13; |
|  |
| 1. Display *(namefirst and count the total number of phones a student is having)* for all student. |
| select namefirst,count(number) total\_phone\_no from student s,student\_phone where s.id=studentid group by namefirst; |
|  |
| 1. Get student’s *(namefirst, namelast, DOB, address, name, college, university, marks, and year)*. |
| select namefirst,namelast,dob,address,name,college,university,marks,year from student s, student\_qualifications sq,student\_address sa where s.id=sq.studentid and sq.studentid=sa.studentid; |
|  |
| 1. Get *(namefirst, namelast, emailID, phone number, and address)* whose faculty name is ‘ketan’. |
| select namefirst,namelast,emailid,number,address from faculty f ,faculty\_address fa, faculty\_phone fp where fa.facultyid=fp.facultyid and f.id=fa.facultyid and namefirst='ketan'; |
|  |
| 1. Get*(course name and batch name)*for all courses. |
| select c.name, cb.name from course c, course\_batches cb, batch\_students where c.id=courseid and batchid=cb.id; |
|  |
| 1. Get all student details who have taken admission in ‘PG-DAC’ course. |
| select\* from student, course c,course\_batches cb,batch\_students bs where c.id=courseid and student.id=studentid and batchid=cb.id and courseid=1; |
|  |
| 1. Get all course details which had started on ‘2016-02-01’. |
| select \* from course c, course\_batches cb where c.id = cb.courseid and starton = '2016-02-01'; |
|  |
| 1. Get all course name and module names which are taught in ‘PG-DAC’ course. |
| select DISTINCT c.name, m.name from course c,course\_modules ,modules m where c.id=courseid and c.name='PG-DAC'; |
|  |
| 1. Display how many modules are taught in each course. |
| SELECT C.NAME,COUNT(COURSEID) FROM COURSE C, COURSE\_MODULES WHERE C.ID=COURSEID GROUP BY NAME; |
|  |
| 1. Display the student detail who are ‘BE’ graduate. |
| SELECT S.\*, NAME, COLLEGE, UNIVERSITY, NUMBER FROM STUDENT S, STUDENT\_QUALIFICATIONS SQ, STUDENT\_ADDRESS SA, STUDENT\_PHONE SP WHERE S.ID=SQ.STUDENTID AND SQ.STUDENTID = SA.STUDENTID AND SP.STUDENTID = S.ID AND SQ.NAME = 'BE'; |
|  |
| 1. Display all distinct course detail, where module for every course is designed. |
| select \* from course c, course\_modules cm, modules m where c.id=courseid and m.id=moduleid; |
|  |
| 1. Display studentID who have more than 2 phone numbers. |
| select namefirst, namelast, count(number) from student s, student\_phone sp where s.id = studentid group by namefirst, namelast having count(number)>2 ; |
|  |
| 1. Display the courses where ‘JAVA1’ is taught. |
| select c.name,m.name from course c, modules m,course\_modules cm where c.id=courseid and m.id=moduleid and m.name='java1'; |
|  |
| 1. Display all student who have taken admission in 6 months course. |
| select namefirst,namelast,duration, c.name from student s, batch\_students bs, course c, course\_batches cb where c.id = cb.courseid and cb.id = bs.batchid and s.id = bs.studentid and c.duration = 6; |
|  |
| 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 name,group\_concat(name) cards from student s , student\_cards where s.id=studentid group by studentid order by namefirst; |
|  |
| 1. Write a query to display the output in the following manner.   **'ruhan', 'DBDA, PG-DAC, Pre-DAC'** |
| select namefirst name, group\_concat(c.name) courses from student s, course\_batches cb, batch\_students bs, course c where c.id=cb.courseid and cb.id = batchid and s.id = studentid group by studentid; |
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