Assignment

Sept23/ DBT/ 009
Database Technologies
Diploma in Advance Computing
September 2023

Joins

USE ***student_phone, student_address, faculty_phone, faculty_address, batch_students, , student_qualifications, faculty_qualifications, course_modules, modules, faculty, student, course, course_batches,student_cards, and student_order*** relation to solve the following queries.

1. Display all *student and with their address* from *student* and *student_address tables*.
select student.ID,student.namefirst,student.namelast,student.DOB,student.emailid,student_address.address from student inner join student_address on student.ID= student_address.ID;
2. Display *(namefirst, namelast, emailID, and student_qualification details)* from *student* and student_*qualification* relations.
select student.namefirst,student.namelast,student.emailid ,student_qualifications.college,student_qualifications.university,student_qualifications.marks,student_qualifications.year from student inner join student_qualifications on student.ID=student_qualifications.studentID;
3. Display *(namefirst, namelast, emailID, college, and university)* who have studied in 'Yale University'. *(Use student, and student_qualification relation)*
select student.namefirst,student.namelast,student.emailid,student_qualifications.university,student_qualifications.college from student inner join student_qualifications on student.ID=student_qualifications.studentID where university="yale university";
4. Display all student details his phone details and his qualification details. *(Use student, student_phone and student_qualification relation)*
select student.ID,student.namefirst,student.namelast,student.DOB,student.emailid,student_phone.number, student_qualifications.college,student_qualifications.university from student join student_phone on student.id=student_phone.studentid join student_qualifications on student_qualifications.studentid=student_phone.studentid;
5. Display *(studentID, namefirst, namelast, name, college, university, and marks)* whose name is 'BE'.*(Use student, and student_qualification relation)*
select student_qualifications.studentid,student_qualifications.name,student.namefirst,student.namelast,student_qualifications.college,student_qualifications.university,student_qualifications.marks from student inner join student_qualifications on student.id=student_qualifications.studentid where name='BE';

6. Display the module name and the duration of the module for the batch “Batch1”.

7. Display student information along with his batch details who have joined in “Batch1”.

8. Display module names for “PG-DAC” course.

```
select course.id,course.name,course_modules.courseid,modules.id,modules.name from course join course_modules on course.id=course_modules.courseid join modules on course_modules.moduleid=modules.id where course.name='PG-dac' limit 9;
```

9. Display *namefirst, namelast, and batch name for all students*.

```
select student.namefirst,student.namelast,batch_students.id,course_batches.name from student join batch_students on student.id=batch_students.id join course_batches on batch_students.id=course_batches.id;
```

10. Display *(namefirst, namelast, phone number, and emailid)* whose student ID is 13.

```
select student.namefirst,student.namelast,student.DOB,student.emailid,student_phone.number from student inner join student_phone on student.ID=student_phone.id where student.id=13;
```

11. Display *(namefirst and count the total number of phones a student is having)* for all student.

```
Select namefirst, count(number) from student join student_phone on student.id=student_phone.studentid group by namefirst;
```

12. Get student’s *(namefirst, namelast, DOB, address, name, college, university, marks, and year)*.

```
select student.namefirst,student.namelast,student.DOB,student_address.address,student_qualifications.name,student_qualifications.college,student_qualifications.university,student_qualifications.marks,student_qualifications.year from student join student_address on student.id=student_address.id join student_qualifications on student_address.studentid=student_qualifications.id ;
```

13. Get *(namefirst, namelast, emailID, phone number, and address)* whose faculty name is ‘ketan’.

```
select faculty.namefirst,faculty.namelast,faculty.emailid,faculty_phone.number,faculty_address.address from faculty join faculty_phone on faculty.id=faculty_phone.facultyid join faculty_address on faculty_phone.facultyid=faculty_address.facultyid where faculty.namefirst='ketan';
```

14. 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 ;
```

15. Get all student details who have taken admission in ‘PG-DAC’ course.

```
Select s.* 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.name='PG-DAC' ;
```

16. Get all course details which had started on '2016-02-01'.

```
select course.id,course.name,course.duration ,course.summery from course join course_batches on course.id=course_batches.courseid where course_batches.starton ='2016-02-01';
```

17. Get all course name and module names which are taught in 'PG-DAC' course.

```
select course.id,course.name,course_modules.courseid,modules.id,modules.name from course join course_modules on course.id=course_modules.courseid join modules on course_modules.moduleid=modules.id where course.name='PG-dac' limit 9;
```

18. Display how many modules are taught in each course.

```
select course.name,count(modules.name) from course join course_modules on course.id=course_modules.courseid join modules on course_modules.moduleid=modules.id group by course.name;
```

19. Display the student detail who are 'BE' graduate.

```
select student.*,student_qualifications.name from student join student_qualifications on student.id=student_qualifications.studentid where student_qualifications.name='BE';


select s.*,sq.name from student s join student_qualifications sq on s.id=sq.studentid where sq.name='BE';
```

20. Display all distinct course detail, where module for every course is designed.

```
select distinct c.id,c.name,m.name from course c join course_modules cm on c.id=cm.courseid join modules m on cm.moduleid=m.id where m.name='node' or m.name='hive' or m.name='Python' or m.name='Aptitude' or m.name='oops with C++ Programming' or m.name='os concepts' or m.name='data structures' or m.name='ios programming';
```

21. Display studentID who have more than 2 phone numbers.

```
select studentid,count(number) from student_phone group by studentid having count(number)>2;
```

22. Display the courses where 'JAVA1' is taught.

```
select distinct c.id,c.name,m.name from course c join course_modules cm on c.id=cm.courseid join modules m on cm.moduleid=m.id where m.name='java1';
```

23. Display all student who have taken admission in 6 months course.

```
select course.name,student.namefirst,student.namelast,student.DOB,student.emailid  ,course.duration from student join course_batches on student.id=course_batches.courseid join  course on course_batches.id=course.id where course.duration=6 ;
```

24. 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 student.namefirst,student_cards.name,student_cards.isActive from student join student_cards on student.id=student_cards.studentid order by student.namefirst asc;
```

25. Write a query to display the output in the following manner. '**ruhan**', '**DBDA, PG-DAC, Pre-DAC**'
select student.namefirst,course.name from student join course_batches on student.id=course_batches.courseid join course on course_batches.courseid=course.id where course.name='PG-DAC'or course.name ='DBDA' or course.name= 'Pre-DAC' ;