Assignment

Database Technologies

**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 \* 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, student\_qualification.\* from student, student\_qualification where student.ID = student\_qualification. 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, student\_qualification where student.ID = student\_qualification. 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, student\_phone, student\_qualification where student.ID = student\_qualification. StudentID and student.ID = student\_phone.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 ID, namefirst, namelast, name, college, university, marks from student, student\_qualification where student.ID = student\_qualification.studentID and student\_qualification.name=’BE’; |
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| 1. Display the module name and the duration of the module for the batch “Batch1”. |
| select modules.name, modules.duration from modules, course\_modules, course\_batches where  modules.ID = course\_modules.moduleID and course\_modules.courseID = course\_batches.courseID and course\_batches.name='Batch1'; |
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| 1. Display student information along with his batch details who have joined in “Batch1”. |
| select \* from student, course\_batches, batch\_students wherecourse\_batches.ID = batch\_students.batchID and batch\_students.studentID = student.ID and course\_batches.name ="Batch1" |
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| 1. Display module names for “PG-DAC” course. |
| select modules.name from course, modules, course\_modules where course.ID = course\_modules.courseID and course\_modules.moduleID = modules.ID and course.name='PG-DAC'; |
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| 1. Display *namefirst, namelast, and batch name for all students*. |
| select namefirst, namelast, course\_batches.name from course\_batches, batch\_students, student  where student.id = batch\_students.studentid and batch\_students.batchid = course\_batches.id; |
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| 1. Display *(namefirst, namelast, phone number, and emailid)* whose student ID is 13. |
| Select namefirst, namelast, number, emailID from student, student\_phone where student.ID = student\_phone.studentID and student.ID=13; |
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| 1. Display *(namefirst and count the total number of phones a student is having)* for all student. |
| select namefirst, count(number) from student, student\_phone where student.id = student\_phone.studentid group by namefirst; |
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| 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, student\_address, student\_qualifications where student.ID = student\_address.studentID and student.Id = student\_qualifications.studentID; |
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| 1. Get *(namefirst, namelast, emailID, phone number, and address)* whose faculty name is ‘ketan’. |
| select namefirst, namelast, emailid, number, address from faculty, faculty\_phone, faculty\_address where faculty.ID = faculty\_phone.FacultyID and faculty.ID = faculty\_address.facultyID and faculty.namefirst = 'ketan' |
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| 1. Get*(course name and batch name)*for all courses. |
| select course.name, course\_batches.name from course, course\_batches where course.ID = course\_batches.courseID; |
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| 1. Get all student details who have taken admission in ‘PG-DAC’ course. |
| select student.\* from course, course\_batches, student, batch\_students where course.ID = course\_batches.courseID and course.name='PG-DAC' and course\_batches.ID = batch\_students.batchID and batch\_students.studentID = student.ID; |
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| 1. Get all course details which had started on ‘2016-02-01’. |
| select course.\* from course, course\_batches where course.ID= course\_batches.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, modules, course\_modules where course.id = course\_modules.courseID and 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 course.name, count(modules.name) from course, modules, course\_modules where course.id = course\_modules.courseID and modules.ID = course\_modules.moduleID group by course.name; |
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| 1. Display the student detail who are ‘BE’ graduate. |
| select \* from student, student\_qualifications where student.id = student\_qualifications.studentID  and student\_qualifications.name = "BE" |
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| 1. Display all distinct course detail, where module for every course is designed. |
| select distinct course.\* from course, modules, course\_modules where course.id = course\_modules.courseID and course\_modules.moduleID = modules.id; |
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| 1. Display studentID who have more than 2 phone numbers. |
| select student.ID, count(\*) from student, student\_phone where student.id = student\_phone.studentID group by student.id having count(\*)>2; |
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| 1. Display the courses where ‘JAVA1’ is taught. |
| select course.\* from modules, course\_modules, course where modules.ID = course\_modules.moduleID and course\_modules.courseID = course.ID and modules.name='Java1'; |
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| 1. Display all student who have taken admission in 6 months course. |
| select student.\* from batch\_students, course\_batches, course, student where batch\_students.batchID = course\_batches.id and course\_batches.courseID = course.ID and batch\_students.studentID = student.ID and course.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(name) from student, student\_cards where student.ID = student\_cards.studentID group by namefirst order by 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(distinct course.name) from student, batch\_students, course\_batches, course where student.ID = batch\_students.studentID and batch\_students.batchID = course\_batches.id and course\_batches.courseID = course.ID group by namefirst order by student.ID; |
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