***TUTORIAL 5***

| 1 | Retrieve all students and their enrolled courses.  Query:  select \* from Students\_3 natural join Courses\_3 natural join Enrollments\_3 |
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| 2 | List all courses along with the students enrolled in them.  Query:  select courseid,coursename,Studentname from courses\_3 natural join Enrollments\_3 natural join students\_3 |
| 3 | Get the names of students who are enrolled in 'Data Structures'.  Query:  select Studentname from courses\_3 natural join Enrollments\_3 natural join students\_3 where coursename='Data Structures' |
| 4 | Find the age of students who are enrolled in 'Calculus'.  Query:  select age from courses\_3 natural join Enrollments\_3 natural join students\_3 where coursename='Calculus' |
| 5 | List the courses along with the number of students enrolled in each course.  Query:  select count(studentId),coursename from courses\_3 natural join Enrollments\_3 group by coursename |
| 6 | Show all students who are majoring in 'Computer Sci' and their courses.  Query:  select Studentid,studentname,major,coursename from courses\_3 natural join Enrollments\_3 natural join students\_3 where major='Computer Sci' |
| 7 | Retrieve the enrollment dates for all students in 'Quantum Physics'.  Query:  select enrollmentdate from courses\_3 natural join Enrollments\_3 where coursename='Quantum Physics' |
| 8 | Find all courses that have at least one student enrolled.  Query:  select coursename,count(studentid) from courses\_3 natural join Enrollments\_3 group by coursename having count(studentid)>=1 |
| 9 | Get the list of students who are not enrolled in any courses. ( Please insert this row in student table before executing INSERT INTO Students\_3 (StudentID, StudentName, Age, Major) VALUES (5, 'ELWIS', 20, 'DBMS') –  \*Hint Use Subquery to get answer \*)  Query:  select \* from students\_3 where studentid not in(select studentid from enrollments\_3) |
| 10 | List all students and their majors who are enrolled in any course.  Query:  select studentid,studentname,major from students\_3 natural join Enrollments\_3 |
| 11 | Count the total number of enrollments per student.  Query:  select count(enrollmentdate),studentid from students\_3 natural join Enrollments\_3 group by studentid |
| 12 | Get the details of students enrolled in multiple courses.  Query:  select \* from students\_3 natural join (select count(courseid),studentid from enrollments\_3 group by studentid having count(courseid)>1) |
| 13 | Find the course with the highest number of enrollments.  Query:  select \* from courses\_3 natural join (select count(studentid),courseid from Enrollments\_3 group by courseid having count(studentid)>1 order by count(studentid)) |
| 14 | Show all students and their ages who are enrolled in courses with more than 3 credits.  Query:  select studentid,studentname,age from students\_3 natural join enrollments\_3 natural join courses\_3 where credits>3 |
| 15 | List all courses along with the names of students enrolled in them, ordered by course name.  Query:  select courseid,coursename,studentname from students\_3 natural join enrollments\_3 natural join courses\_3 order by coursename |