

## Individual Activity 05

**Write SQL retrieval commands for each of the following queries:**

1. Display the numbers and names of all courses for which Professor Bemdt has been qualified.

```
1 SELECT CourseNumber, CourseName
2 FROM Courses
3 WHERE ProfessorQualified = 'Professor Bemdt';
```

2. Display the class roster, including student name, for all students enrolled in section 2714 of ISM 4212.

```
1 SELECT Students.StudentName
2 FROM Students
3 JOIN Enrollments ON Students.StudentID = Enrollments.StudentID
4 WHERE Enrollments.SectionNumber = 2714 AND Enrollments.CourseNumber = 'ISM 4212';
```

3. How many students were enrolled in section 2714 during semester 1-2018?

```
1 SELECT COUNT(StudentID) AS NumberOfStudents
2 FROM Enrollments
3 WHERE SectionNumber = 2714 AND Semester = '1-2018';
```

4. How many students were enrolled in ISM 3113 during semester 1-2018?

```
1 SELECT COUNT(StudentID) AS NumberOfStudents
2 FROM Enrollments
3 WHERE CourseNumber = 'ISM 3113' AND Semester = '1-2018';
```

5. What are the names of the course(s) that student Altvater took during the semester 1-2018?

```
1 SELECT Courses.CourseName
2 FROM Courses
3 JOIN Enrollments ON Courses.CourseNumber = Enrollments.CourseNumber
4 JOIN Students ON Students.StudentID = Enrollments.StudentID
5 WHERE Students.StudentName = 'Altvater' AND Enrollments.Semester = '1-2018';
```

6. List the names of the students who have taken at least one course that Professor Collins is qualified to teach.

```
1 SELECT DISTINCT Students.StudentName
2 FROM Students
3 JOIN Enrollments ON Students.StudentID = Enrollments.StudentID
4 JOIN Courses ON Enrollments.CourseNumber = Courses.CourseNumber
5 WHERE Courses.ProfessorQualified = 'Professor Collins';
```

7. List the names of the students who took at least one course with "Syst" in its name during the semester 1-2018.

```
1 SELECT DISTINCT Students.StudentName
2 FROM Students
3 JOIN Enrollments ON Students.StudentID = Enrollments.StudentID
4 JOIN Courses ON Enrollments.CourseNumber = Courses.CourseNumber
5 WHERE Courses.CourseName LIKE '%Syst%' AND Enrollments.Semester = '1-2018';
```

8. How many students did Professor Collins teach during the semester 1-2018?

```
1 SELECT COUNT(DISTINCT Students.StudentID) AS NumberOfStudents
2 FROM Students
3 JOIN Enrollments ON Students.StudentID = Enrollments.StudentID
4 JOIN Courses ON Enrollments.CourseNumber = Courses.CourseNumber
5 WHERE Courses.ProfessorQualified = 'Professor Collins' AND Enrollments.Semester = '1-2018';
```

9. List the names of the courses that at least two faculty members are qualified to teach.

```
1 SELECT Courses.CourseName
2 FROM Courses
3 JOIN FacultyCourses ON Courses.CourseNumber = FacultyCourses.CourseNumber
4 GROUP BY Courses.CourseNumber, Courses.CourseName
5 HAVING COUNT(FacultyCourses.FacultyID) >= 2;
```