

Lab 05

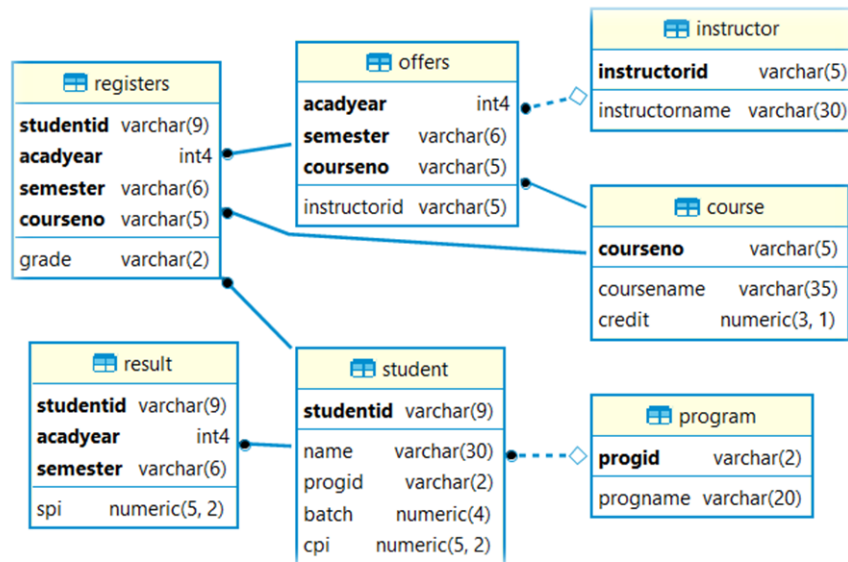
Querying operations on relations .2

IT615 Database Management System, Autumn'2021; pm_jat @ daiict

In this lab too, you practice querying databases using Relational Algebra and SQL.

Here you write perform some queries on DA-ACAD database. The database instance (named as **acad**) with some sample data is also available in public database on the same server.

Here is database schema diagram for your reference:



Your goal here is to write relational algebra expressions and SQL statements for answering following queries. [Algebraic expressions can be handwritten and scanned]

1. List Faculty (ID, Name) for all courses of Autumn'2010
2. List Students (ID, Name) from batch 2008 registered for course MT101 in Autumn'2008.
3. List Students (ID, Name) from B Tech (progid='01') batch 2008 registered for course MT101 in Autumn'2008.
4. List courses that were offered but students were not registered in those offerings
5. List students (id, name, courseno, grade) who got 'F' grade in Autumn'2008
6. List Courses (Course No, Title, Credits) offered by Instructor (ID='PMJ') in semester Winter'2010.
7. Produce transcript of student '200711002' for Academic year 2008-09
List Course No, Course Name, Course Credit, Grade
8. List ID of students who have taken both courses - 'MT101' AND 'MT104'.
9. List ID of students who have taken 'MT101' but not 'MT104'