

Advanced Database

Master's Course / Assignment 1

IUST, fall 2017

Relational Algebra Exercise

Consider the following relations:

Student(ssn, name, address, major)

Course(code, title)

Registered(ssn,code)

1. List the codes of courses in which at least one student is registered (registered courses):
2. List the titles of registered courses (of those in 1.)
3. List the codes of courses for which no student is registered
4. The titles of courses for which no student is registered.
5. Names of students and the titles of courses they registered to.
6. SSNs of students who are registered for 'Database Systems' or 'Analysis of Algorithms'.
7. SSNs of students who are registered for both 'Database Systems' and 'Analysis of Algorithms'.
8. List of courses in which all students are registered.
9. List of courses in which all 'ECMP' major students are registered.