Due: Mon Aug 22 2015.

Question 1

Consider the following database schema.

COURSES = \{(CourseNo, Title, Credits)\}
STUDENTS = \{(IDNo, Name, DOB, Department)\}
TRANSCRIPTS = \{(IDNo, CourseNo, Semester, Year, Grade)\}

Write the following queries in SQL and in Relational Algebra.

Q1: List names of all students in the Computer Science department.
Q2: List names of all students in the Computer Science department who were born in 1990 or earlier.
Q3: List all courses (course numbers and titles) taken by John Doe.
Q4: List all courses (course numbers and titles) taken by John Doe in which he has a grade of A.
Q5: List all courses (course numbers and titles) taken by John Doe in Spring 2015 in which he has a grade of A.
Q6: List all courses (course numbers and titles) taken by Computer Science students.
Q7: List all courses (course numbers and titles) with a credit hour larger than 3 taken by Computer Science students.