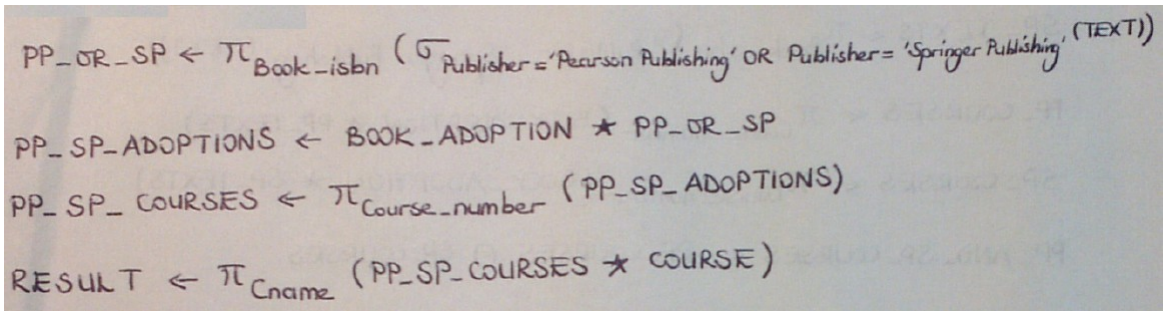
# CS34800 - PSO Solutions – Week 7

Consider the following relations for a database that keeps track of student enrollment in courses and the books adopted for each course:

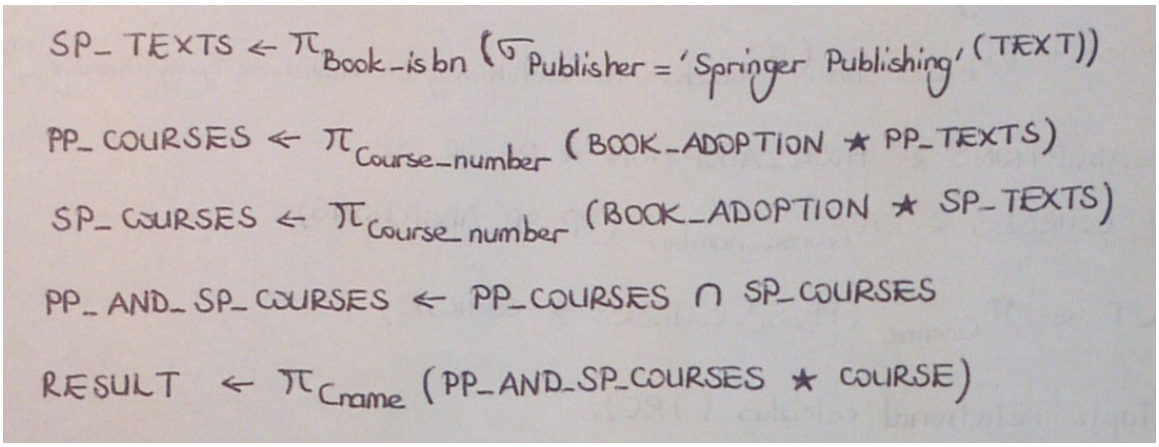
STUDENT (ID, Name, Major, Bdate)
COURSE (Course_number, Cname, Dept)
ENROLLED (ID, Course_number, Quarter, Grade)
BOOK_ADOPTION (Course_number, Quarter, Book_isbn)
TEXT (Book_isbn, Book_title, Publisher, Author)

Write the following queries in relational algebra:

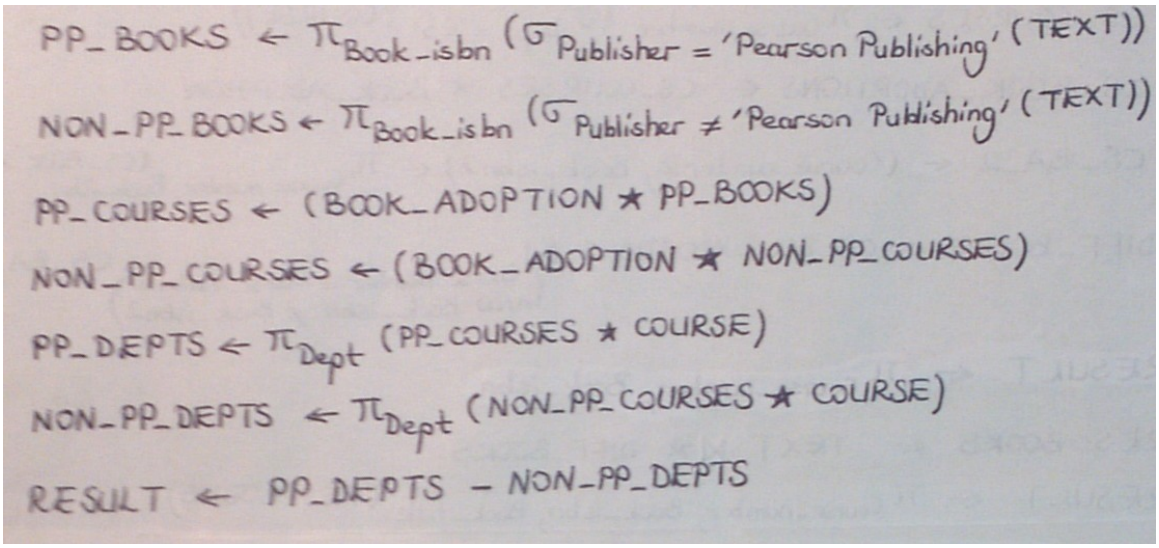
1. List the names for courses, which have used textbooks published by ‘Pearson Publishing’ or ‘Springer Publishing’.



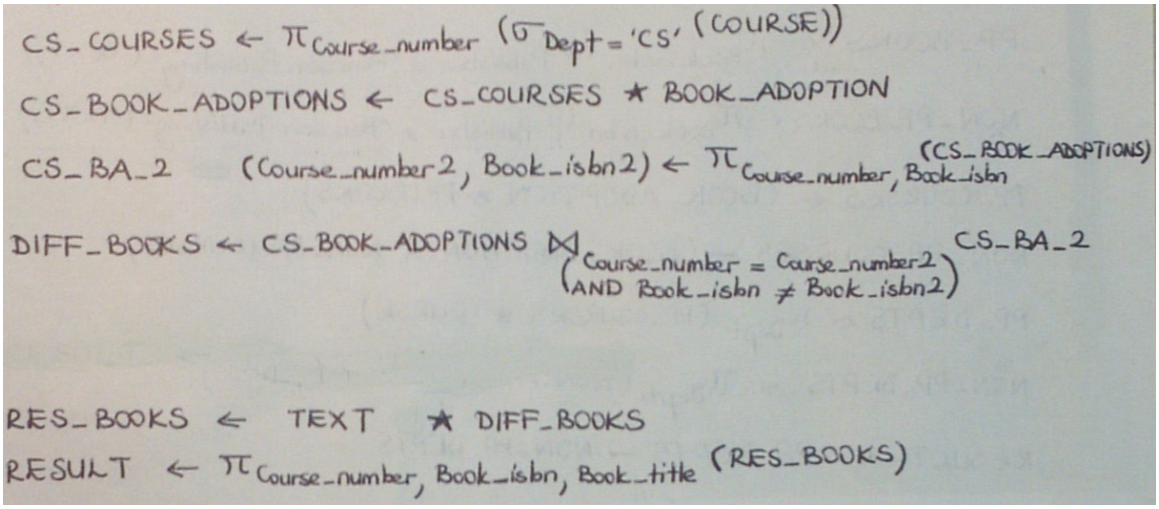

2. List the names for courses, which have used textbooks published by ‘Pearson Publishing’ and ‘Springer Publishing’.



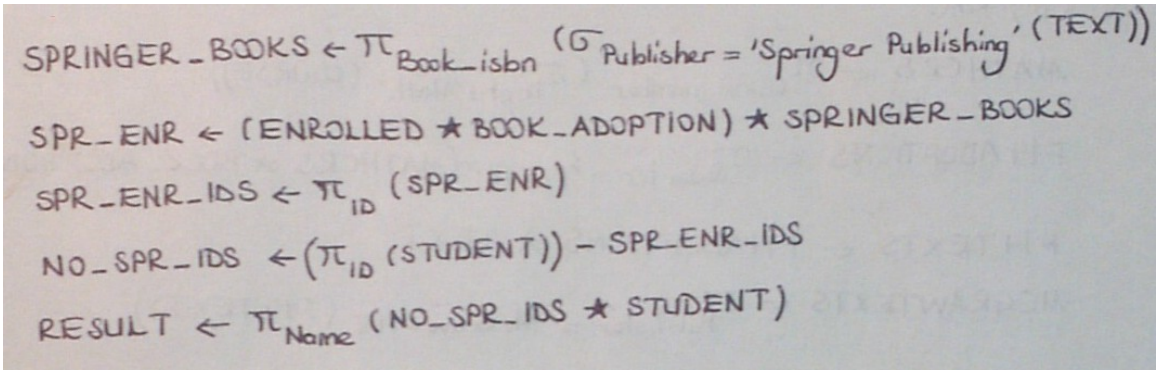
3. List the departments, which have all of their adopted books published by ‘Pearson Publishing’.




4. Provide a list of textbooks (include Course_number, Book_isbn, Book_title) for courses offered by the ‘CS’ department that have used more than one book.



5. List the names of students who have not been enrolled in any courses that use textbooks published by ‘Springer Publishing’.




6. List the names of students who are enrolled in all courses offered by the ‘Math’ department in the quarter ‘Fall 2014’, which use a textbook published by ‘McGraw-Hill’.