

Kadir Has University
Department of Computer Engineering
CE 242 - Data Structures and Algorithms
Spring 2010 – Ahmet Ardal
Project Assignment 3

1. Write a java program that reads CourseStudentMap data from a text file and constructs a CourseStudentMap object. A text file named "course-student-data.txt" is given in the project folder, its content is as follows:
 - First line contains student names separated by commas
 - Second line contains course names separated by commas
 - Remaining lines are structured like this: "course_name:student_1, student_2, student_3, ..."

Your program should open the file for reading and do the following:

- Read first line, split it into tokens (using commas), insert each student to the "map" (the CourseStudentMap object) using the insertStudent() method.
- Read second line, split it into tokens (using commas), insert each course to the "map" (the CourseStudentMap object) using the insertCourse() method.
- Read remaining lines and for each line;
 - First split the line into two tokens (using the colon character as separator) first token is the course name.
 - Then split the second token into subtokens (using the comma character as separator), now each token is a student name.
 - Using the insertRelation() method, insert relations between the course and students.

Hints:

- Use Java's Scanner class for splitting lines into tokens (There are many resources on how to use Scanner class on the web).
- Use file reading part of the code from project-1 for file operations.