import java.util.\*;

class Course {

String code;

String title;

String description;

int capacity;

List<String> schedule;

List<String> registeredStudents;

public Course(String code, String title, String description, int capacity, List<String> schedule) {

this.code = code;

this.title = title;

this.description = description;

this.capacity = capacity;

this.schedule = schedule;

this.registeredStudents = new ArrayList<>();

}

public boolean registerStudent(String studentID) {

if (registeredStudents.size() < capacity) {

registeredStudents.add(studentID);

return true;

}

return false;

}

public boolean dropStudent(String studentID) {

return registeredStudents.remove(studentID);

}

public String toString() {

return "Code: " + code + ", Title: " + title + ", Description: " + description + ", Capacity: " + capacity +

", Schedule: " + schedule + ", Registered Students: " + registeredStudents.size() + "/" + capacity;

}

}

class Student {

String id;

String name;

List<String> registeredCourses;

public Student(String id, String name) {

this.id = id;

this.name = name;

this.registeredCourses = new ArrayList<>();

}

public void registerCourse(String courseCode) {

registeredCourses.add(courseCode);

}

public void dropCourse(String courseCode) {

registeredCourses.remove(courseCode);

}

public String toString() {

return "ID: " + id + ", Name: " + name + ", Registered Courses: " + registeredCourses;

}

}

public class CourseRegistrationSystem {

public static void main(String[] args) {

Course c1 = new Course("CSC101", "Introduction to Computer Science", "An introductory course to computer science concepts", 30, Arrays.asList("Mon 10:00 AM - 12:00 PM", "Wed 10:00 AM - 12:00 PM"));

Course c2 = new Course("MAT201", "Calculus I", "Fundamental concepts of calculus", 25, Arrays.asList("Tue 1:00 PM - 3:00 PM", "Thu 1:00 PM - 3:00 PM"));

Student s1 = new Student("1001", "John Doe");

Student s2 = new Student("1002", "Jane Smith");

// Registering students for courses

c1.registerStudent(s1.id);

c1.registerStudent(s2.id);

c2.registerStudent(s1.id);

// Display course details

System.out.println("Course 1: " + c1);

System.out.println("Course 2: " + c2);

// Display student details

System.out.println("Student 1: " + s1);

System.out.println("Student 2: " + s2);

// Dropping a course

c1.dropStudent(s2.id);

// Display updated course details

System.out.println("Course 1 after dropping a student: " + c1);

    }

}