

# CSE341

## HOMEWORK #3



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## PART 1

**route(X,Y,C):** this allows us to find all connected nodes according to all flights by route(ankara,Y,C). or check specific flight by route(ankara,istanbul,C). or route(ankara,istanbul,1).

## PART 2

**classToStudent(Student,Course):** This function is for "Check whether a student can be enrolled to a given class" and "Check which classes a student can be assigned". First it finds student and course according to student id and course id input. Takes data from them. After that checks if wanted course conflicts with students current courses. If not checks if wanted course capacity is enough for student. If true checks room according if student is handicapped or not.

classToStudent(1,Course).

classToStudent(1,cse341).

**assign(Room,Course):** This function is for "Check which room can be assigned to a given class" and "Check which room can be assigned to which classes". First finds course and checks data from there. Finds that courses instructor to determine wanted equipment, then looks if equipment is ok for room. At last checks if rooms capacity is enough for courses capacity.

assign(c1, Course).

assign(c1, cse101).

**findConflicts(Course1,Course2):** This function is for "Check whether there is any scheduling conflict". First finds courses and takes hours data from them. From there it goes to recursive search function which compares hours one by one to check if any conflicts happen and returns it.


findConflicts(cse341,Course2).

## SCREENSHOTS

**route(X,Y,C)**

```
route(ankara,Y,C).  
C = 6,  
Y = izmir  
C = 8,  
Y = diyarbakir  
C = 1,  
Y = istanbul  
C = 5,  
Y = rize  
C = 4,  
Y = van  
route(ankara,istanbul,C).  
C = 1  
route(ankara,istanbul,1).  
true
```


**classToStudent(Student,Course)**

 `trace, classToStudent(1, Course).`

**Call:** `classToStudent(1, _10156)`


**Course** = cse341

**Course** = cse102


 `trace, classToStudent(2, Course).`

**Call:** `classToStudent(2, _10156)`

**false**

 `classToStudent(1, cse341).`

**true**

 `classToStudent(1, cse101).`

**false**

**assign(Room, Course)**

 `assign(c1, cse101).`

**true**


 `assign(c1, Course).`

**Course** = cse341

**Course** = cse102

**Course** = cse101

**findConflicts(Course1, Course2)**

 `findConflicts(cse341, Course2).`

**Course2** = cse341

**Course2** = cse102