

CSE 341

HOMEWORK 3:

REPORT

-Serdil Anıl Ünlü
-1801042672

PART1:

- I check the if there is conflict. ex: conflict(CourseID1,CourseID2).

```
?- conflict(X,Y).  
X = cse341,  
Y = cse343.
```

```
?- conflict(cse331,Y).  
Y = cse321.
```

- I query for check which room can be assigned to a given class. - Ex: assign(z10,CourseID) or assign(RoomID,cse341).
- I query for check which room can be assigned to which classes. - Ex: assign(RoomID,CourseID)

```
?- assign(z10,X).
X = cse341 ;
X = cse331 ;
X = cse321 .

?- assign(RoomID,CourseID).
RoomID = z23,
CourseID = cse341 ;
RoomID = z10,
CourseID = cse341 ;
RoomID = z06,
CourseID = cse343 ;
RoomID = z11,
CourseID = cse343 ;
RoomID = z23,
CourseID = cse343 ;
RoomID = z06,
CourseID = cse331 ;
RoomID = z11,
CourseID = cse331 ;
RoomID = z23,
CourseID = cse331 ;
RoomID = z10,
CourseID = cse331 ;
RoomID = z23,
CourseID = cse321 ;
RoomID = z10,
CourseID = cse321 .

?- assign(RoomID,cse343).
RoomID = z06 ;
RoomID = z11 ;
RoomID = z23 ;
```

- I query for check which room can be enrolled to a given class. Ex: enroll(3,cse341).(This output will be true capacity and equipment situations are not conflict).
- I check which classes a student can be assigned. Ex: enroll(5,CourseID).

```
?- enroll(3,cse341).
true .

?- enroll(5,CourseID).
CourseID = cse343 ;
CourseID = cse343 ;
CourseID = cse321 ;
CourseID = cse321 .
```

```
?- enroll(5,cse331).  
false.
```

- Also I add the adding room, adding course and student functions to system.
- Ex: addStudent(StudentID, CourseList, HCap).
- Ex: addRoom(RoomID, RoomCapacity, EquipmentRequire).
- Ex: addCourse(CourseID, TeacherID, CourseCapacity, CourseHour, RoomID, List)

PART2:

By using the route feature and the recursive feature, I print all combinations of how many different distances a city has to which cities.

-Ex: route(canakkale,X,C).