CSE 341 PL HW3 1801042609 YAKUP TALHA YOLCU

Add student

```
?- add_student(20,[cse101,cse343],no).
true.

?- student(20,A,B).
A = [cse101, cse343],
B = no.

?-
```

Add course

```
?- add_course(cse353,newinst,20,2,z23,projector,[8,9,10]).
true .

?- course(cse353,A,B,C,D,E).
A = newinst,
B = 20,
C = 2,
D = z23,
E = projector.

?-
```

Add room

```
?- add_room(z17,20,[projector,handicapped]).
true.

?- room(z17,A,B).
A = 20,
B = [projector, handicapped].

?-
```

Check_conflict

```
?- add_course(cse353,newinst,10,2,z23,no_need,[8,9,10]).
true .

?- conflicts(A,B).
A = cse101,
B = cse353 ;
A = cse101,
B = cse102 ;
A = cse101,
B = cse353 ;
A = cse102,
B = cse101 .

?-
```

```
?- assign(z17,cse353).
true .

?-
```

Assign room to a course

```
?- assign(z17,X).
X = cse101 ;
X = cse102 ;
X = cse241 ;
X = cse353 ;
X = cse102 ;
X = cse241 ;
X = cse343 .

?-
```

Room can be assigned which classes

```
?- add_student(20,[],no).
true.

?- enroll(20,cse101).
true .

?- add_student(21,[cse102],yes).
true.

?- enroll(21,cse241).
true .

?-
```

Enroll student to a course

```
true .

?- enroll(3,X).
X = cse101 ;
X = cse343 ;
true .

?-
```

Student can be enrolled to which courses

	COURSES-ID	INSTRUCTOR	CAPACITY	HOURS	ROOM	SPECIAL NEED
1	CSE101	GÖKTÜRK	10	2	z23	PROJECTOR
2	CSE102	GENÇ	6	3	z23	NO NEED
3	CSE241	AKGÜL	5	4	z06	NO NEED
5	CSE343	KALKAN	10	2	z10	SMART BOARD

	ROOMS	CAPACITY	SPECIAL EQUIPMENT	ACCESS FOR HANDICAP
1	Z06	10	PROJECTOR	YES
2	Z10	10	SMARTBOARD	YES
3	Z23	10	PROJECTOR	YES

	INSTRUCTOR	PREFERENCE
1	GÖKTÜRK	PROJECTOR
2	GENÇ	NO NEED
3	AKGÜL	NO NEED
4	KALKAN	SMART BOARD

	STUDENT	COURSES	HANDICAPPED
1	S1	101,102,241	YES
2	S2	101,102	YES
3	S3	101,241	NO
4	S4	101	NO
5	S5	102,241	NO
6	S6	101,102	NO
7	S7	101,102	NO
8	S8	101	NO
9	S9	101	NO
10	S10	101,343	YES
11	S11	101,343	NO
12	S12	102,343	NO
13	S13	102,343	YES
14	S14	102,343	NO
15	S15	102,241	NO

	z23	z06	z10
8	cse101		
9	cse101,cse102	cse241	
10		cse241	
11		cse241	
12	cse102	cse241	
13	cse102		
14			
15			cse343
16			cse343
17			

```
?- route(diyarbakir,ankara,X).
X = 8 ;
X = 16 ;
X = 12 ;
X = 9 ;
X = 16 ;
X = 17 ;
X = 17 ;
false.

?-
```

Check if there is a route between two given cities

```
?- route(istanbul,canakkale,X).
X = 13 ;
X = 29 ;
X = 26 ;
X = 30 ;
X = 18 ;
X = 22 ;
false.

?-
```

```
?- route(antalya,X,C).
X = erzincan,
C = 3 ;
X = diyarbakir,
C = 4 ;
X = izmir,
C = 2 ;
X = canakkale,
C = 9 ;
X = diyarbakir,
C = 10 ;
X = izmir,
C = 8 ;
X = ankara,
C = 12 ;
X = erzincan,
C = 11 ;
X = izmir,
C = 10 ;
X = izmir,
C = 18 ;
X = rize,
C = 17 ;
X = istanbul,
C = 13 ;
X = van,
C = 16
```

list all the connected cities for a given city