

Practice Queries

Consider the following tables.

student		enrolledIn		subject	
id	name	id	code	code	lecturer
1234	joe	1234	cs1500	cs1500	curtis
4000	hector	1234	cs1200	cs2001	dave
2000	ling	1234	cs2001	cs3010	curtis
		4000	cs3010	cs2001	olivier
		4000	ma3000	ma3000	roger

Figure out which relational algebra operations were used to obtain each of the following tables.

1.
name

joe
hector
ling

2.
lecturer

curtis
dave
olivier
roger

3.
code | lecturer

cs3010 | curtis
cs1500 | Curtis

There are two ways to get this table. Try to list both. *Hint*: Use an OR in the selection condition for one method.

4.

id	name
1234	joe
4000	hector

There are three ways to get this table. *Hint*: How about using the difference operator?

5.

id	name	id	code
1234	joe	1234	cs1500
1234	joe	1234	cs1200
1234	joe	1234	cs2001
1234	joe	4000	cs3010
1234	joe	4000	ma3000

6.

id	name	id	code
1234	joe	1234	cs1500
1234	joe	1234	cs1200
1234	joe	1234	cs2001

7.

id	name	code
1234	joe	cs1500
1234	joe	cs1200
1234	joe	cs2001

8.

id	code
1234	cs1500
1234	cs1200
1234	cs2001

9.

id	name	code	lecturer
4000	hector	cs3010	curtis
4000	hector	ma3000	roger

10.

name	lecturer
joe	curtis
hector	curtis