

```
[benjykatz=# SELECT lastName, stuId, credits FROM Student WHERE major = 'Math';
```

```
  lastname | stuid | credits
```

1

```
-----+-----+-----
```

Chin	S1002	36
------	-------	----

McCarthy	S1013	0
----------	-------	---

Jones	S1015	42
-------	-------	----

```
(3 rows)
```

```
[benjykatz=# SELECT * FROM Faculty WHERE department = 'CSC';
```

```
  facid | name | department | rank
```

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```
-----+-----+-----+-----
```

F105	Tanaka	CSC	Instructor
------	--------	-----	------------

F221	Smith	CSC	Professor
------	-------	-----	-----------

```
(2 rows)
```

3

```
[benjykatz=# SELECT DISTINCT classNumber FROM Enroll;  
classnumber  
-----  
HST205A  
MTH101B  
ART103A  
CSC201A  
MTH103C  
(5 rows)
```

```

^
benjykatz=# ALTER TABLE faculty
benjykatz=# RENAME COLUMN name TO FacultyName;
ALTER TABLE
benjykatz=# ALTER TABLE faculty
RENAME COLUMN facid TO FacultyNumber;
4 ALTER TABLE
benjykatz=# SELECT FacultyName, FacultyNumber FROM faculty ORDER BY name ASC;
ERROR: column "name" does not exist
LINE 1: ...T FacultyName, FacultyNumber FROM faculty ORDER BY name ASC;
^
benjykatz=# SELECT FacultyName, FacultyNumber FROM faculty ORDER BY FacultyName ASC;
 facultyname | facultynumber
-----+-----
Adams        | F101
Byrne        | F110
Smith        | F115
Smith        | F221
Tanaka       | F105
(5 rows)

```

5

```

[benjykatz=# SELECT lastName, FirstName FROM Student Where major = 'Math' AND credits>=30 AND credits<=59;
 lastname | firstname
-----+-----
Chin     | Ann
Jones    | Mary
(2 rows)

```

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```
benjykat=# SELECT stuId, grade FROM Enroll JOIN Class ON Enroll.classNumber = Class.classNumber WHERE Class.facId = 'F110' ORDER BY stuId ASC;
```

stuId	grade
S1002	B
S1010	
S1020	A

(3 rows)

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```
benjykat=# SELECT STRING_AGG(Enroll.classNumber, ','), lastName, firstName, major FROM Student JOIN Enroll ON Enroll.stuId = Student.stuId JOIN Class ON Class.classNumber = Enroll.classNumber WHERE Class.facId = 'F110' GROUP BY Student.stuId;
```

string_agg	lastname	firstname	major
MTH103C	Chin	Ann	Math
MTH103C	Burns	Edward	Art
MTH101B	Rivera	Jane	CSC

(3 rows)

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```
benjykat=# SELECT t.* FROM (SELECT e.classNumber, e.schedule, e.room, f.classNumber, f.schedule, row_number()OVER(ORDER BY e.room ASC) AS row FROM Class e JOIN Class f ON e.room = f.room AND e.classNumber != f.classNumber ORDER BY e.classNumber)t WHERE t.row%2 =0;
```

classnumber	schedule	room	classnumber	schedule	row
CSC203A	MThF12	M110	CSC201A	uThF10	6
HST205A	MWF11	H221	ART103A	MWF9	2
MTH103C	MWF11	H225	MTH101B	MTuTh9	4

(3 rows)