

## Goals:

Practice UPDATE  
Practice DELETE  
3 table Joins  
Having Clause

### 1. Assigned Reading and research

- Read about Delete and Having

<https://dev.mysql.com/doc/refman/8.0/en/delete.html>

<https://stackoverflow.com/questions/16155937/mysql-having-vs-where>

- Optional: If you wish to *practice* delete and update statements without actually changing the data, read about Transactions:

<https://dev.mysql.com/doc/refman/8.0/en/commit.html>

### 2. Create one query with a GROUP BY and a HAVING clause to return *only* the records of data that answers this question:

Question: *Which* students have signed up for the same classes more than once?

- Hints and requirements:
  - Three tables are needed.
  - Subselects are not allowed for this query.
  - Include `Student.FirstName` in the result set.
  - Include `Class.Code` in the result set.
  - Include the number of times the student signed up.
  - Include first and last `ClassStudent.Signupdate`
  - (table aliases are acceptable)

**Deliverable :** send your code and your result set.

### 3. Create a procedure to Delete the `ClassStudent` record for a given `Class.Code` and `Student.FirstName` (values will be provided as parameters.)

- The class and firstname parameters will be varchars that match the table types.
- Parameter names shall not have the same name as the table columns.
- You may use JOINS or DECLARE variables to update the correct record.
- The procedure run the procedure using the following instruction:
- The procedure name must match this test.

```
Call DeleteClassStudent( 'COMM113', 'Hope' );
```

**Deliverable 2:** send your code.

**4. Deliverable 3:** Discuss what potential issues will arise with the DELETE procedure *as it is defined*. (Do not include discussion regarding difficulty with the code, only the inherent issues based on the procedure definition itself.) Why does that issue not *appear* to be a problem with the data you have in the development database?

### 5. Create and run an UPDATE statement:

- Set all birthdates to exactly 18 years ago from “today”, IF the Birthdate has StudentID = 2 OR if the FirstName has an ‘o’ or an ‘e’ in the name.
- Use a date function with an interval and the `NOW()` function to assign the value.

- Hard-coding yesterday's date does not earn full credit.
- Run the `UPDATE` instruction.

**Deliverable 4:** send your code.

**6. Run this code:** `call GetData();`

**Deliverable 5:** send all three of your result sets.