## CS 477 Lab #5 – Data – Due 10/10 at end of the day

You are going to finish building a simple app using a database that will allow you to save additional information from your todo list lab (lab3). Writing a ToDo list is only useful if you can keep it around for a while. Your app should behave as specified in lab3 EXCEPT that you will now have your lists between runs. You don't need to worry about list item ordering (i.e. moving DONE items to the end).

Databases can be tricky. Add things one at a time and test the intermediate steps. I've found that adding everything at once almost always will result in an application that crashes and I end up commenting stuff out until I figure out what I did wrong.

- This is a small DB so don't worry that you will load it in the UI thread—for larger examples, you should be doing this elsewhere using an AsyncTask to load or one of the newer features like LiveData or ViewModels to do this.
- Modify the onCreate() <u>in your Helper class</u> so that the database starts with some entries in it every time it gets created (but not every time the app is run).
- One of the big differences between your earlier lab and this one is the adapter. You will need to use a SimpleCursorAdapter to hold the cursor that results from getting your list info from your database. You may want to look at the sample code online to figure out how to do this.
- Keep the database up to date when something gets added, add it to the db (and the list) and when something gets deleted (i.e. a done element is removed), then delete it from the db (and the list).
- Submit .apk, layout files and java code on blackboard as usual. Remember to use Build->Build APK