Cosc 5/4730 Program #5
Due: October 24, 2016 by 5pm 50 points

Write the following phone app. Make sure to comment your code and that your name is in a comment line at the beginning of code. Lastly remember, the program will be graded on correctness, comments, and both coding style.

This is part two and you will need program 4. You are going to write the Content Provider needed in program 4. I'll provide some code to help and you should include and be able test everything with your program3 assignment. You will likely need fix any problems in your problem 4 assignment as well, so you can test the content provider.

Cosc 4730 students:

You will need a backend database and content provider, using the provider name: edu.cs4730.prog4db

Content provider and tables:
For content://edu.cs4730.prog4db/Category You will need to provide a create, update, query, delete methods. As a note, you can't delete an entry in the category when it still exists in the Transaction table(s).

Category table:
_id: integer number assigned by the content provider, which will match the Category entry in the transaction table.
Name: a string name.
The create line and column names are provided in the sample code.

For content://edu.cs4730.prog4db/Accounts/transactions/1 is the default checking table. This on created by default for cs4730 to use without the need to use the accounts table. As with the category, you will need to provide create, update, query, delete methods.

Transaction table:
_id: a number assigned by the content provider, but will represent the row in many things.
Date: listed in any format, it's just a string in the database
Type: a string, to represent a check number, ATM, credit (purchase), deposit
Name: name of payee or name for the entry
Amount: A dollar amount (as a real number)
Category: an integer id number, where the name is listed in the category table (see below)
There is also a row id number, assigned by the content provider and is created as a foreign key.
The create line and column names are provided in the sample code.

You will be responsible for providing all the rest of the "glue" for the database methods to make the content provider work correctly.

Content provider URIs:
content://edu.cs4730.prog4db/Category is for the category table of information
content://edu.cs4730.prog4db/Category/# is for a row
content://edu.cs4730.prog4db/Accounts/transactions/1 is the default checking table.
content://edu.cs4730.prog4db/Accounts/transactions/1/# is the default table and accessing a row.
You must also provide the glue for the loaders to work.

For 5730 students:
You will have another table and uri.
content://edu.cs4730.prog4db/Accounts is the account table. You will need to provide create, query, and delete methods. You can throw an exception for the update method. When a new entry is created in Accounts, you must also create a new table for the transactions as well. Example: insert "Saving" in accounts table, then you will also create a table called Saving that all the transactions for this account are stored in. When you delete an entry in the account table, then the associated transaction table is also deleted (dropped) as well.

Accounts table:
  _id: which is assigned by the database and corresponds to the content://edu.cs4730.prog4db/Accounts/transactions/1 where 1 is the first table in the accounts table, a 2 would be the second table in the accounts table.
  Name: string name which is the name of the account for the transactions table.
The create line and column names are provided in the sample code.

Content provider URIs:
content://edu.cs4730.prog4db/Accounts lists all the accounts
content://edu.cs4730.prog4db/Accounts/# lists one row of the accounts.
And again, you must also provide the glue for the loaders to work.

TURN IN and GRADING:
Hard copy:
1. A cover page with Name, program #3, cosc 4730 or 5730 depending on which class you enrolled in, a repo name (see github and below for you repo name).

Soft copy:
1. Use this link to create your repo https://classroom.github.com/assignment-invitations/83d26225c319a4d2673576e899c4b3fe
2. Upload the project to your repo
3. Create/Edit the readme.md file, add the following:
    - Course number 4730 or 5730
    - Name
    - how to run the program (this is likely very simple for program 1),
    - which phone/emulator to run on including special information like android version (ie v4.4) and screen size.

- Or if you are using the borrowed, phone, Nexus 5X.

4. Lastly ensure everything has uploaded to the github website and not just the local repo.

Code will be graded on correctness, comments, and coding style.