**Exe #4 CS364 – This is the last assignment of the term**

**Due 05/26/2021 14:00 – I will discuss my design in class.**

**Problem (25 points)** Assume that you are designing a database for a bookstore. The owner wants to track his/her customers, books, and publishers. For each customer, the owner wants to track the name, phone numbers, overall purchase amount so far (in dollar amount), and book genres of the customer has purchased. For each book the owner trackers the ISBN, the title, author(s), quantity in stock, and publisher. For each publisher the owner tracks the address, main phone number, and book genres published by the publisher. Note that the owner ***does not wish to track which customer bought what specific books***. That is, the owner may not know what books have been purchased by Mr. Reed. However, the owner knows Mr. Reed has spent $3212.50 in the store so far.

You need to use some kind of graphic software to draw the ER diagram. Give your E-R diagram of your database design (15 points). Give your **normalized table design (logical database)** that represents your E-R model (tables with key and fields, and relationships represented, 10 points).

If you are using Word, here is Author and Genre. This your database design does not have this as a requirement. If you do not know how to design the logical database for this, please ask in class.

N:M

GID  
GenreName

**GENRE**

AID  
PenName  
FirstName  
LastName

**Author**