CSC 134 Fall 2020

Homework Assignment #1

Draw an ER diagram accordingly to the following user requirements. You can draw the diagram using tools that you prefer. Hand-drawn diagram will not be accepted. Please submit a PDF file to Canvas.

User requirements:

A book store application keeps track of the books, publishers, authors, editors, and customers, as well as purchases made by the customers.

The store sells all kinds of books such as text books, novels, child story books, and recipe books. Each book has a unique code called ISBN. The store also records other details of books such as its title, current selling price and published date.

Authors of a book are also recorded, which include each author's first name and last name. An author's name is not unique, so the store assigns an ID to each author. If a book is edited by editors, then the store keeps track of editors' information, including each editor's id (unique), first name, and last name.

Each book is published by a publisher. The publisher's information includes name, address, and a phone number. The publisher name is not unique so the book store assigns each publisher a unique ID.

Customer's data is also collected in order to give discounts to the loyal customers in the future, including customer ID (unique), customer name, and address. When a customer places an order to purchase books, the store keeps track of the order. One customer can place many orders. For each order, assign a unique order_ID to the order and record the order date. Each order can contain one or more books. A customer can order more than

one copy of the same book in the same order, so number of copies also needs to be recorded.

- A book may not have an author. For example, a book can be edited by editors.
- A book can be written by one or more authors and one author can write many books.
- An author should have written at least one book.
- One book can be bought through different orders (since there are different copy of the same book).
- A customer should buy at least one book in order to have an account in the book store.
- An order should be placed by one and only one customer.
- One book can be published by one and only one publisher.
- A publisher can publish many books, at least one.
- One book can be edited by many editors. One editor can edit many books, at least one.

Hint: