

**CS 353 Spring 2017**

**Homework 3**

**Due:** 20 March, Thursday till 17:00

**Q.1 [100 pts, 10 pts each]** Consider the following relational schema:

Author(ID: integer, name: string, city: string)

Publisher(pubName: string, pubCity: string)

Book(ISBN: integer, title: string, soldCopies: integer, price: integer, publisherName: string)

Authorship(ID: integer, ISBN: integer, year: integer, income: integer)

Write **SQL** statements for following questions.

- (a) Create the given tables including appropriate primary and foreign key constraints.
- (b) Give the ID and name of the authors who live in one of the cities Ankara, Istanbul, Izmir, Bursa, or Adana, and have written more than one book.
- (c) Find the books that have more than one author, and print book ISBN and title.
- (d) For each author, print ID and the author's total income from his/her books that are published by "McGraw-Hill" between 2000 and 2016.
- (e) Give the average price of the books written by the authors who live in Ankara or Istanbul.
- (f) Give the name of the author of best sellers (books with the highest number of sold copies).
- (g) Give the ID and names of the authors who have a book with an income greater than the income of some books of "Abraham Silberschatz".
- (h) Give the names of the authors who live in the same city as a publisher which published one of his/her books.
- (i) Give the ID and names of the authors who don't have any book published by McGraw-Hill.
- (j) Give the ID and names of the authors who have some books published by both McGraw-Hill and Springer.