

**New York University**  
**Computer Science Department**  
**Courant Institute of Mathematical Sciences**

**Course Title:** Database Systems  
**Instructor:** Jean-Claude Franchitti

**Course Number:** CSCI-GA.2433-001  
**Session:** 5

**Assignment #5**

I. Due

October 27, 2022 at the beginning of class.

II. Objectives

1. Learn Relational Algebra, Relational Calculus, and Domain Calculus.

III. References

1. Slides and handouts posted on the course Web site
2. Textbook chapters 6 and 8.

IV. Software Required

1. Microsoft Word.
2. Win Zip as necessary.

V. Assignment

1. Textbook exercises: 6.10, 6.16, 8.20, 8.27, 8.28, 8.33
2. Save the file as a Word document.
3. Name the file “**firstname\_lastname\_hw\_5.doc**” (e.g., “john\_doe\_hw\_5.doc”).
4. Submit your assignment via Brightspace by the due date.

Use the following naming convention in the subject line of the eMail:  
**“DB - firstname lastname - homework 5”**  
(e.g.: “DB – John Doe - homework 5”).

In case source code is submitted, include your name as a comment at the top of each file  
(Note: all files submitted should include your name).

## VI. Deliverables

### 1. Electronic:

Your assignment must be submitted via Brightspace. The file must be created and sent by the beginning of class. After the class period, the homework is late. The Brightspace clock is the official clock.

### 2. Cover page and other formatting requirements:

The cover page supplied on the next page must be the first page of your assignment.

Fill in the blank area for each field.

### **NOTE:**

**The sequence of the electronic file submission is:**

- 1. Cover sheet**
- 2. Assignment Answer Sheet(s)**

### **Assignment Layout (25%)**

- o Assignment is neatly assembled on 8 1/2 by 11 layout.
- o Cover page with your name (last name first followed by a comma then first name), date, NYU NetID, and course section number along with a signed statement of independent effort is included.
- o Answers to textbook exercises in Questions V.1. are correct.
- o File name is correct.

### **Answers to Individual Questions:**

**(100 points total, all questions weighted equally)**

- o Assumptions provided when required.

## VII. Sample Cover Sheet:

Name \_\_\_\_\_ Date: \_\_\_\_\_  
(last name, first name)

NYU NetID: \_\_\_\_\_

Section: \_\_\_\_\_

### **Assignment 5**

**Total in points** (100 points total): \_\_\_\_\_

**Professor's Comments:**

**Affirmation of my Independent Effort:** \_\_\_\_\_  
(Sign here)