CS631 Assignment-1

Due date: See the Assignment page on Canvas

Do answer all of the 8 items below and **submit** a word/pdf file via Canvas. If you have a question, email your instructor.

1- (20 points) Define the following terms:
   data, *database*, *DBMS*, *database system*, *database catalog*, *program-data independence*, *user view*, *DBA*, *end user*, and *canned transaction*.

2- (10 points) What is the difference between **a database schema** and **a database state**?

3- (10 points) Describe the main components in a DBMS.

4- (10 points) Describe the types of facilities you would expect to be provided in a multi-user DBMS.

5- (10 points) Explain the difference between **logical data independence** and **physical data independence**.

6- (10 points) Explain the difference between **external**, **internal**, and **conceptual schemas**. How are these different schema layers related to the concept of logical and physical data independence?

7- (10 points) What is the difference between the **two-tier** and **three-tier client/server** architectures?

8- (20 points) Search the job listing sites and list detailed job requirements for

   1 DBA
   1 Database developer
   1 Database designer