



Assignment #1



- ❑ Do Practice Exercises (p.32):
 - ❑ 1.4

- ❑ Do Exercises (p.32):
 - ❑ 1.7, 1.8, 1.10, 1.11

- ❑ Due: Before the next lecture (9/7, Wed.), 9:59AM



1.4 (30pt)

1.4 Suppose you want to build a video site similar to YouTube. Consider each of the points listed in Section 1.2 as disadvantages of keeping data in a file-processing system. Discuss the relevance of each of these points to the storage of actual video data, and to metadata about the video, such as title, the user who uploaded it, tags, and which users viewed it.



1.7 (30pt)

- ❑ List four significant differences between a file-processing system and a DBMS.



1.8 (30pt)



- ❑ Explain the concept of physical data independence and its importance in database system.



1.10 (30pt)

- ❑ List at least two reasons why database systems support data manipulation using a declarative query language such as SQL, instead of just providing a library of C or C++ functions to carry out data manipulation.



1.11 (30pt)

- ❑ Assume that two students are trying to register for a course in which there is only one open seat. What component of a database system prevents both students from being given that last seat?