

HW1

张云策 3200105787

1.7

A.A DBMS system can link data as a whole to ensure that all programs with permission to input can read/modify the data and act on the physical level, But the file-processing systems change some data that will not be read by another.

B. A DBMS system can allow users with different privileges to make changes at any time, and it is difficult for the file-processing systems to do this.

C.A DBMS system can handle the problem on concurrent-access anomaly so that there is no error, but it is difficult for the file-processing systems to do this.

D.A DBMS system can allow users with different permissions to access data at the same time, and will try to avoid being attacked (such as SQL injection, etc.), while file-processing systems can only allow a single user or two users with the same permissions to access data.

1.8

Physical data independence is a feature that separates the physical data stored in the storage medium from the logical structure written by the programmer, so that the programmer does not have to worry about dealing with physical data, but only needs to deal with the logical level

1.9

- a. interaction with the file manager.
- b. integrity keeping.
- c. security protection.
- d. backup and recovery.
- e. concurrency-access anomaly protection.

the problem:

- a. The DBMS will not work , Because it couldn't search anything stored in the disk.
- b.It not satisfied with Consistency constraints.
- c. Secret file data can be accessed maliciously
- d. There is a high risk of file data loss
- e. Data may be maliciously tampered with, or it may result in a violation of consistency constraints, resulting in data errors

1.15

Because the facebook is unkonwn in China , so we choose Wechat to answer the question.

A.A users table containing the user Wechat ID , user name, user telephone number, user avatar, and some user profile information.

B.A wechat moments containing user own moments, user's moment's picture or videos, user's moment's text, and user's firends' moment's something.

C.A wechat wallet containing the user's balance, user's cards, and user's transactions, user's ID info etc.