1.6Queries used in the Web are specified by providing a list of keywords with no specific syntax. The result is typically an ordered list of URLs, along with snippets of information about the content of the URLs. In contrast, database queries have a specific syntax allowing complex queries to be specified. And in the relational world the result of a query is always a table.

1.7 The file system is a collection of data and for any management with it, the user has to write the procedures, while DBMS is a collection of data and user need not write the procedures for handling the database. Learn about what is the difference between a file system and DBMS from the table given.

1.8 Physical Data Independence is defined as the ability to make changes in the structure of the lowest level of the Database Management System (DBMS) without affecting the higher-level schemas. Hence, modification in the Physical level should not result in any changes in the Logical or View levels.

1.9 A general purpose database manager (DBM) has five responsibilities:

a. interaction with the file manager.

b. integrity enforcement.

c. security enforcement.

d. backup and recovery.

e. concurrency control.

**1.11** The Transaction Isolation component of the database prevents both students from being given the last seat of the course

1.15 **a**) A users table containing users, with attributes such as account name, real name, age, gender, location, and other profile information

**b.** A content table containing user provided content, such as text and

images, associated with the user who uploaded the content.

**c**. A friends table recording for each user which other users are connected to that user. The kind of connection may also be recorded

in this table.

**d**. A permissionstable, recording which category of friends are allowed

to view which content uploaded by a user. For example, a user may

share some photos with family but not with all friends.