

# MSDS 7330

## File Organization and Database Management

### Homework Assignment 1

This is a homework assignment for MSDS7330, File Organization and Database Management. This quiz is due at the end of the synchronous class period in which the unit is discussed or whenever the instructor turns you to hand it in; whichever comes first. Enter your answer to each question in the MSDS 7330 Homework Answer Sheet Word document. Be sure to place your name and due date in the Homework Answer Sheet, and place your last name and the homework number at the beginning of the file name. For example, the filename for the homework answer sheet for homework 2 for Sohail Rafiqi should be *Rafiqi2MSDS7330HomeWorkAnswerSheet.docx*.

For each question, in the Homework Answer Sheet state the letter of your chosen answer and write out the explanation why the answer is correct. Note that the explanation involves also explaining why the other answers are not correct.

Your answer Word document should be submitted on the 2DS system for the quiz number equal to the homework number. For example, the homework 2 should be submitted for homework assignment 2.

- 1) The DBMS acts as an interface between what two components of an enterprise-class database system?
  - a) Database application and the database
  - b) Data and the database
  - c) The user and the database application
  - d) Database application and SQL
- 2) The following are components of a database except which of the following?
  - a) user data
  - b) metadata
  - c) reports
  - d) indexes
- 3) Table is synonymous with the term
  - a) record
  - b) relation
  - c) column
  - d) row
- 4) Row is synonymous with the term
  - a) column
  - b) relation
  - c) field
  - d) record
- 5) Attribute is synonymous with the term
  - a) record
  - b) relation
  - c) column
  - d) row
- 6) For some relations, changing the data can have undesirable consequences called:
  - a) referential integrity constraints.
  - b) modification anomalies.
  - c) normal forms.
  - d) transitive dependencies.
- 7) The different classes of relations created by the technique for preventing modification anomalies are called:
  - a) normal forms.
  - b) referential integrity constraints.
  - c) functional dependencies.
  - d) relation instance.
- 8) A *database schema* is
  - a) A plan created by the database.
  - b) The logical design of the database.
  - c) A particular instance of a database.
  - d) The snapshot of the data in the database at a given time.
- 9) The primary key is selected from the
  - a) composite keys.
  - b) determinants.
  - c) candidate keys.
  - d) foreign keys.
- 10) Which of the following is a group of one or more attributes that uniquely identifies a row?
  - a) Key
  - b) Determinant
  - c) Tuple
  - d) Relation

- 11) A relation is considered a
- a) Column.
  - b) one-dimensional table.
  - c) two-dimensional table.
  - d) three-dimensional table.
- 12) In the relational model, relationships between relations or tables are created by using:
- a) composite keys.
  - b) determinants.
  - c) candidate keys.
  - d) foreign keys.
- 13) You have run an SQL statement that asked the DBMS to display data in a table named UserTables. The results include columns of data labeled 'TableName,' 'NumberOfColumns' and 'PrimaryKey.' What are these labels?
- a) user data
  - b) metadata
  - c) a report
  - d) indexes
- 14) An Enterprise Resource Planning application is an example of a(n) ?
- a) single-user database application
  - b) multiuser database application
  - c) e-commerce database application
  - d) data mining database application
- 15) The following are functions of a DBMS except ?
- a) creating and processing forms
  - b) creating databases
  - c) processing data
  - d) administering databases