Assignment A1

Chapter1:

Ch1Q1: Processed data, or _____, can be used as the foundation for decision making.
a. raw data b. information c. queries d. DP

Ch1Q2: Accurate, relevant, and timely _____ is the key to good decision making.
a. processing b. data c. information d. relationships

Ch1Q3: What is the name for data about data?
a. metadata b. raw data c. superdata d. unique data

Ch1Q4: Data management is a discipline that focuses on _____.
a. the management of end users b. the help items to be used by end users c. the proper generation, storage, and retrieval of data d. the proper generation, storage, and retrieval of information

Ch1Q5: What is a benefit of using a DBMS?
a. It helps create an environment for end users to have access to more data. b. It provides full security to data using private/public key encryption. c. It provides seamless Internet access to database data. d. It creates automatic backups.

Ch1Q6: The _____ receives all application requests and translates them into the complex operations required to fulfill requests.
a. DBMS b. workgroup c. DB d. query

Ch1Q7: An ad hoc query is a _____.
a. spur of the moment question b. question that will not return any results c. pre-scheduled question d. pre-planned question

Ch1Q8: What is the name for an answer to a query that the DBMS sends back to the application?
a. query result set b. DBMS result c. data result d. question result

Ch1Q9: A single-user database that runs on a personal computer is called a(n) _____ database.
a. workgroup b. desktop c. enterprise d. distributed

Ch1Q10: A database that supports data distributed across several different sites is called a(n) _____ database.
a. workgroup b. enterprise c. desktop d. distributed

Ch1Q11: A _____ focuses primarily on storing data used to generate information required to make tactical or strategic decisions.
a. data warehouse b. workgroup database c. production database d. distributed database

Ch1Q12: Another name for a production database is a _____ database.
a. development b. transactional c. data mining d. warehouse

Ch1Q13: John is working in the customer table and needs to know what customers are located in Florida. To find the information he would _____.
a. create a new query b. utilize the Database Wizard c. create a new table d. create a new form

Ch1Q14: Which of the following products do not provide an enterprise database?
a. MS Access b. IBM DB2 c. MS SQL Server d. Oracle RDBMS

Ch1Q15: The design of a _____ database recognizes the use of historical and aggregated data.
a. production b. data warehouse c. multiuser d. single-user

Ch1Q16: Data processing (DP) specialists are in existence because of _____.
a. the increase in the number of computers b. the need to speed up processing of data c. the need to track data and produce required reports d. the advent of database management systems

Ch1Q17: A _____ system is composed of software, hardware, data, procedures and people.
a. database b. computer c. software d. file

Ch1Q18: A record consists of a _____.
a. collection of related records b. set of one or more fields c. group of files d. character

Ch1Q19: All fields for a specific entity can be grouped together as a _____.
a. record b. file c. database d. field

Ch1Q20: A(n) _____ allows the user to specify what must be done without specifying how it must be done.
a. object-oriented language b. script c. procedural language d. nonprocedural language

Ch1Q21: Data _____ exists when it is possible to make changes in the data storage characteristics without affecting the application program's ability to access the data.
a. mining b. integrity c. inconsistency d. independence

Ch1Q22: Because all data access programs are subject to change when any of the file's data storage characteristics change (that is, changing the data type), the file system is said to exhibit _____.
a. data dependence b. logical data format c. data independence d. physical data format

Ch1Q23: _____ independence exists when it is possible to make changes in the file structure without affecting the application program's ability to access the data.
a. Logical b. Structural c. Physical d. Fragmentation

Ch1Q24: Data _____ exists when the same data are stored unnecessarily at different places.
a. dependency b. fragmentation c. redundancy d. inconsistency

Ch1Q25: A data _____ develops when all of the required changes in the redundant data are not made successfully.
a. anomaly b. redundancy c. dependence d. inconsistency

Ch1Q26: _____ are the people who use application programs to run the organization's daily operations.
a. End users b. Data practitioners c. Database programmers d. Managers

Ch1Q27: _____ are considered database architects.
a. Systems administrators b. Database designers c. Systems analysts and programmers d. Database administrators

Ch1Q28: Where does the DBMS store the definitions of data elements and their relationships?
a. data file b. data dictionary c. data map d. index

Ch1Q29: Activities that make the database perform more efficiently in terms of storage and access speed are known as performance _____.
a. development b. upgrades c. enhancements d. tuning

Ch1Q30: The DBMS allows the user to specify what must be done, without having to specify how it is to be done, by using a(n) _____.
a. access control b. security system c. table generator d. query language

Ch1Q31: _____ is the de facto query language and data access standard supported by the majority of DBMS vendors.
a. Structured Query Language b. 4GL c. Access Query Language d. DBMS

Chapter2:

Ch2Q1: A(n) _____ of the overall database design is required to overcome the fact that data are viewed in different ways by different people.
a. analysis b. review c. footprint d. blueprint

Ch2Q2: A customer _____ would be described by attributes such as customer last name, customer first name, customer phone, customer address, and customer credit limit.
a. relationship b. model c. constraint d. entity

Ch2Q3: The basic building blocks of all data models are entities, attributes, relationships, and _____.
a. queries b. constraints c. business rules d. multiples

Ch2Q4: What type of relationship is expressed with the phrase "Painter paints Painting"?
a. M:N b. M:1 c. 1:M d. 1:1

Ch2Q5: What type of relationship is expressed with the phrase "Employee manages Store"?
a. 1:M b. 1:1 c. M:N d. M:1

Ch2Q6: What type of relationship is expressed with the phrase "Student takes Class"?
a. M:N b. 1:1 c. 1:M d. M:1

Ch2Q7: What is the fastest and most direct source of business rules?
a. company documentation b. a database design document c. interviews with end users d. the Internet

Ch2Q8: A(n) _____ is a brief, precise, and unambiguous description of a policy, procedure, or principle within a specific organization.
a. attribute b. entity c. constraint d. business rule

Ch2Q9: As a general rule, a noun in a business rule will translate into a(n) _____ in the model.
a. constraint b. entity c. relationship d. attribute

Ch2Q10: The hierarchical database model is based on a _____.
a. lack of a child segment b. matrix c. lack of a parent segment d. tree structure

Ch2Q11: The hierarchical database model depicts a set of _____ relationships.
a. many-to-one b. one-to-many c. many-to-many d. one-to-one

Ch2Q12: A _____ is the equivalent of a file system's record type.
a. child b. parent c. segment d. root

Ch2Q13: Which data model was developed most recently?
a. network model b. relational c. XML d. file system

Ch2Q14: Within the network model, the _____ is the conceptual organization of the entire database as viewed by the database administrator.
a. subschema b. data management language c. schema d. DBTG

Ch2Q15: A relational database is a collection of _____.
a. field values b. tables c. common fields d. records

Ch2Q16: A relation is a matrix consisting of a series of row and column _____.
a. intersections b. models c. links d. systems

Ch2Q17: One of the advantages of a relational data model is _____.
a. structural dependence b. easier database design c. complex database design d. conceptual complexity

Ch2Q18: For most relational database software, the query language is _____.
a. RDBMS b. 4GL c. String Query Language (SQL) d. Structured Query Language (SQL)

Ch2Q19: From an end-user perspective, any SQL-based relational database application involves three parts: a user interface, a set of tables stored in the database, and the _____.
a. relationships between the tables b. business rules c. RDBMS d. SQL engine

Ch2Q20: Each row in the relational table is known as an entity _____.
a. relationship b. instance c. model d. attribute

Ch2Q21: How is an entity represented in an ERD?
a. diamond b. triangle c. circle d. rectangle

Ch2Q22: What is the name for the most current (and most used) notation of the ERD?
a. Chen model b. SQL c. Crow's Foot notation d. Date model

Ch2Q23: In the object-oriented data model (OODM), both data and their relationships are contained in a single structure known as a(n) _____.
a. attribute b. object c. entity d. constraint

Ch2Q24: Classes are organized as a class _____.
a. object b. system c. hierarchy d. method

Ch2Q25: In the OO data model, a class _____ represents a real-world action such as finding a selected PERSON's name.
a. interface b. method c. inheritance d. hierarchy

Ch2Q26: The ERDM is primarily geared to business applications, while the OODM tends to focus on _____ applications.
a. educational b. personal c. non-commercial Internet d. very specialized engineering and scientific

Ch2Q27: Database models can be grouped into two categories: conceptual models and _____ models.
a. query b. physical c. logical d. implementation

Ch2Q28: XML databases have emerged to address the need to manage _____ data within the native XML format.
a. structured b. relational c. unstructured d. object-oriented

Ch2Q29: Data models were developed to _____.
a. allow DBMSs to maintain loose control over the database activities b. deposit data within a single file c. model real-world objects or events d. keep data within multiple data repositories

Ch2Q30: Which model represents the end users' view of the data environment?
a. internal b. conceptual c. physical d. external

Ch2Q31: The most widely used conceptual model is the _____ model.
a. OO b. implementation c. E-R d. internal

Ch2Q32: The _____ model presents a global view of the entire database.
a. logical b. conceptual c. network d. physical

Ch2Q33: A(n) _____ model is independent of both hardware and software.
a. developmental b. conceptual c. external d. logical

Ch2Q34: Which model operates at the lowest level of abstraction?
a. internal b. conceptual c. external d. physical

Ch2Q35: Which model is the representation of the database as "seen" by the DBMS?
a. internal b. conceptual c. physical d. external

SQL Statements for A1

MySQL Workbench and SSH Login Procedures:

- FSU_CCI_MySQL_Workbench_Login.pdf
- Video: http://qcitr.com/vids/MySQL_Workbench_Login.mp4
- FSU_CCI_MySQL_SSH_Login_PC_PuTTY.pdf
- FSU_CCI_MySQL_SSH_Login_MAC.pdf

Windows PuTTY Helper Videos:

- http://qcitr.com/vids/PuTTY_Configuration.mp4
- http://qcitr.com/vids/PuTTY_PSFTP.mp4

(*__Be sure__* to review the "**SQL Statements**" tutorial in Database Resources, **and** the **database** at the bottom of the page. It is ***highly*** recommended that you check your answers by uploading the necessary tables and data, use **premiere.sql** and see instructions found w/in the "**Assignments**" area of our course, available w/in FSU's Learning Management System.)

The following SQL exercises use **premiere.sql**:

1. List all the contents (rows or records) of the ORDERS table.
2. Create an alias for an attribute name.
3. List the order line number, part number, number ordered, and quoted price from the ORDER_LINE table in ascending order by quoted price.
4. Remove part number CB03 from the PART table.
5. Modify the city, state, and zip code of sales rep number 06.
6. Add two records to the part table.

For the following exercises, download, then upload gmc.sql (see Notes > Joins) to your database on the CCI server. Also, be sure to thoroughly review the Joins PDF file, as well as the course textbook.

The following SQL exercises use **gmc.sql**:

7. List all dealership names, vehicle types and makes for each dealership (use EQUI-JOIN, aka "old-style" join).
8. List all dealership names, as well as all sales reps first, last names, and their total sales for each dealership (use JOIN ON).
9. List how many vehicles each dealership owns (display dealer id, name, and *number* of vehicles for each dealership), use JOIN USING.
10. List each dealership's total sales, include dealer's name and total sales (captured in dealership_history table), use NATURAL JOIN.
11. List the average total sales for each sales rep in each dealership, include dealer ID, name, sales reps' id, and first and last names, use NATURAL JOIN.

__Be sure__ to use the updated MySQL Workbench, PuTTY, and MySQL command-line login procedures above.
Mac users, once logged in, the commands in the video work exactly the same as for Windows users.

Helper Video: http://qcitr.com/vids/LIS3784_A1.mp4