Quizlet

database midterm

Transitive dependency can only exist if the data is uniquely identified by a composite primary key.	False	☆
A field is a basic unit of data also referred to as a record.	False	☆
Partial dependency exists if what conditions exist?	column is dependent only on a portion of a composite primary key	☆
Data redundancy is	False	☆

created through a process known as normalization.		
A good _____ has many features that allow users to gain access to data in a database without having to do any programming.	DBMS	☆
What steps/tasks are required to convert unnormalized data to third normal form (3NF)?	Any repeating groups are eliminated from the unnormalized data and a primary key is identified to put the data in first normal form. If the primary key is a composite primary key, then any **partial** dependencies must also be eliminated to convert the data to second normal form. Once the data is in second normal form, any transitive dependencies are eliminated and the data is then in third normal form.	☆
Which of the following is an interface tool that allows a user to create edit, and manipulate data in Oracle 12c?,	SQL*Plus	☆
The Systems Development Life Cycle is a series of steps that can be used to guide the development process for a database management system.	True	☆
Which of the following committees are responsible for establishing SQL guidelines?	ANSI and ISO	☆

A character is a basic unit of data and can consist of a numberletter, or special symbol.	True	☆
A database file requires a large amount of disk space and internal _____.	memory	☆
Redundancy wastes space because you are storing different types of data in the same place.	False	☆
A good ___ should provide an opportunity for users to incorporate integrity constraints when they design the database.	DBMS	☆
A foreign key is usually found on which side of a relationship?	many	☆
Data mining refers to analyzing historical data stored in a database.	True	☆
A record in the logical design of a database corresponds to a row in the physical table of a relational database.	True	☆
Which of the following terms refers to a group of related records?	file	☆

A DBMS includes which of the following capabilities?	all of the above	☆
In an E-R Model a person place, or thing with characteristics to be stored in the database are referred to as?	entity	☆
If at least one value in a record does not depend upon the primary key then a _____ exists.	transitive dependency	☆
A field in the logical design of a database corresponds to a ___ in the physical database.	column	☆
The problem of inconsistency in data is a direct result of _____.	Redundancy	☆
Structured Query Language (SQL) is generally used to interact with a database.	True	☆
Data is in _____ normal form if it does not have any repeating groups and has a primary key.	First	☆
Sharing data is one advantage of database processing.	True	☆

Tables can be linked or joined together through their primary keys.	False	☆
A(n) _____ relationship cannot exist in a physical relational database.	many-to-many	☆
Storing the same data in more than one place is called ___.	redundancy	☆
An) _____ is used to uniquely identify each record.	primary key	☆
A(n) _____ is a storage structure that contains data.	database	☆
During the ___ process, a database expert determines the structure of the required database	database design	☆
A(n) _____ is used to create and maintain the structure of a database.	DBMS	☆
In which step of the Systems Development Life Cycle (SDLC) is the solution to the identified problem determined and understood?	systems analysis	☆

In which step of the Systems Development Life Cycle (SDLC) is the system actually used by the end-user on a regular basis?	systems deployment	☆
An advantage of using the database approach to processing is that it facilitates consistency.	True	☆
One disadvantage of a database system is ___.	a larger file size	☆
What represents a characteristic or attribute that is being collected about an entity?	field	☆
The following types of relationships can be included in an Entity-Relationship Model: one-to-one, one-to-many, many-to-many.	True	☆
Which of the following is used to uniquely identify each record?	primary key	☆
Which of the following statements is correct?	In a nondatabase, file-oriented environment, data is often partitioned into several disjointed systems with each system having its own collection of files.	☆
A collection of fields is a file.	False	☆
A column represents a field in the physical database table.	True	☆

The multi-step process used when creating a new system is referred to as ___.	the Systems Development Life Cycle	☆
A ___ is a storage structure designed to hold a collection of data.	database	☆
___ is the prevention of unauthorized access to the database.	Security	☆
Software packages, called database management systems, can do the job of manipulating databases for you.	True	☆
Which of the following can lead to **partial** dependencies?	composite primary key	☆
Which of the following is not a step in the Systems Development Life Cycle (SDLC)?	all of the above are steps in the SDLC	☆
A one-to-many relationship cannot be included in a relational database.	False	☆
A person who is in charge of a database within an organization is often called the database ___.	administrator	☆

In a(n) _____ relationship between two entities each occurrence of the first entity is related to many occurrences of the second entity and each occurrence of the second entity is related to only one occurrence of the first entity.	one-to-many	☆
Data is in second normal form (2NF) if it contains no repeating groups and has a primary key to uniquely identify each record.	False	☆
Data in second normal form (2NF) may contain which of the following?	transitive dependencies	☆
A(n) _____ table can be added to the physical database to eliminate a many-to-many relationship.	bridging	☆
What type of relationship is depicted in Figure 1?	one-to-one	☆
Data is in second normal form if it is in first normal form and has no _____.	**partial** dependencies	☆
Partial dependency can only exist if the data is	True	☆

uniquely identified by a composite primary key.		
When you need to change data	redundancy makes your changes more cumbersome and time-consuming.,True	☆
Which statement best describes the relationship shown in Figure 1?	For every occurrence of A, there can only be one occurrence of B.	☆
A bridging table can be used to eliminate a many-to-many relationship in a relational database.	True	☆
A collection of records is a file.	True	☆
A DBA can assign passwords to prevent unauthorized users from accessing the data.	True	☆
To create forms to use with a database you must write a program.	False	☆
Analyzing historical sales data stored in a database is commonly referred to as ___.	data mining	☆
A straight line with a crow's foot at one end depicts a(n) _____ relationship in an E-R Model.	one-to-many	☆
Popular ___ include	DBMSs	☆

Access, Oracle, DB2, MySQL, and SQL Server.,DBMSs		
Partial dependency means that at least one of the data values is dependent on only a portion of the primary key.	True	☆
What is added to a relational database to eliminate many-to-many relationships?	bridging table	☆
A field is a group of related _____.	characters	☆
An integrity constraint is a rule that ___.	data must follow in the database	☆
Which of the following usually correlates to a primary key in another table?	foreign key	☆
A foreign key uniquely identifies each row in a table.	False	☆
Which of the following is used to determine the correct organization for data that is to be stored in a database?	normalization process	☆
Which of the following can be used to link the data in two or more tables together?	common field	☆

If a recipe contains several ingredients, and those ingredients can also be used in other recipes, this would be an example of what type of relationship?	many-to-many	☆
Data is in third normal form if it is in second normal form and has no _____.	transitive dependencies	☆
If the data has no **partial** dependencies repeating groups, or transitive dependencies, and has a composite primary key, the data is in which form?	third normal form (3NF)	☆
If a primary key has been identified for the data then the data is considered to be in first normal form (1NF).	False	☆
_____ is a data sublanguage that processes sets of data.	SQL	☆
Which of the following terms best describes where a group of characters that represents a customer's address would be stored in the logical design?	field	☆

Each table in a database represents two or more entities.	False	☆
The fact that a person can wear different size clothes and that different people can wear the same size clothes is best characterized as a what type of relationship?	one-to-all	☆
Data in first normal form (1NF) does not contain which of the following?	repeating groups	☆
A file is composed of a group of related _____.	Records	☆
If entity A in Figure 2 represents customers and entity B represents automobiles, which of the following statements is correct?	Each customer can own many cars, but each car can be owned by only one customer.	☆
Data in third normal form (3NF) contains which of the following?	none of the above	☆
Analyzing historical data stored in a database is referred to as _____.	data mining	☆
A solid straight line in an E-R Model depicts a(n) _____ relationship.	one-to-one	☆

A record in the logical design of a database is represented by what in the physical database?	row	☆
What is the purpose of a foreign key?	A foreign key is used to link data together that is contained in more than one table. It is usually found in the many side of a one-to-many relationship and links to the primary key in the other table.	☆
A visual way to represent a database is with a(n) ___.	entity-relationship diagram	☆
A program, or collection of programs, through which users interact with a database is known as a(n) _____.	DBMS	☆
A(n) _____ is a group of interrelated files.	database	☆
SQL commands can be issued in Oracle 12c through _____ which is an interface that allows users to interact with the database.	SQL*Plus	☆
If uncontrolled, what can lead to data anomalies?	data redundancy	☆
Two tables can be linked or joined together through a common field.	True	☆

A one-to-many relationship means that an occurrence of a specific entity can only exist once in each table.	False	☆
Programs created with Visual Basic, Java, Perl, PHP, or C++ can access the database directly, rather than having to access it through the DBMS.	False	☆
Which of the following terms is considered the basic unit of data in a database?	character	☆
A file is referred to as a(n) _____ in an Oracle 12c database.	table	☆
Which of the following does not contain repeating groups, but has a primary key and possibly **partial** dependencies?	first normal form (1NF)	☆
A record in the logical design of a database corresponds to a ___ in the physical database.	row	☆
Only one type of relationship can be represented in an Entity-Relationship Model.	False	☆

A(n) _____ is a basic unit of data that can consist of a letter, number, or special symbol.	character	☆
Which of the following terms represents a collection of fields?	record	☆
Suppose that a patient in a hospital can only be assigned to one room. However, the room may be assigned to more than one patient at a time. This is an example of what type of relationship?	one-to-many	☆
A database will not only hold information about multiple types of entities, but also information about the relationships among these multiple entities.	True	☆
What is the purpose of an E-R Model?	An E-R Model is used by designers to determine the types of relationships that exist among entities to be included in the database. In particular, it identifies many-to-many relationships that must be eliminated before the physical database is created.	☆
What type of relationship is depicted in Figure 2?	one-to-many	☆
The occurrence of data anomalies would	True	☆

indicate an unnormalized database design.		
___ are screen objects used to maintain, view, and print data from a database.,	forms	☆
The relationship between different entities (in different tables) is handled by their common columns.	True	☆
A(n) _____ is a common field between two tables and is also a primary key for one of the tables.	foreign key	☆
A foreign key appears on the many side of a one-to-many relationship.	True	☆
Which of the following types of relationships cannot exist in a relational database?	one-to-one	☆
Data mining refers to ___.	analyzing data already stored in a database	☆
An attribute is a characteristic or property of an entity.	True	☆
A(n) _____ is referred to as a row in the physical database.	record	☆
A ___ is a group of	database	☆

interrelated files.		
The steps used to design and develop a database are commonly referred to as the _____.	SDLC	☆
A(n) ___ is also called a field or column in many database systems.	attribute	☆
A group of people in charge of a database within an organization is often called the _____.	DBA	☆
An entity is represented by a column in the Entity-Relationship Model.	True	☆
A(n) ___ frees programmers who write database access programs from having to engage in mundane data manipulation activities, such as adding new data and deleting existing data.	DBMS	☆
Eliminating _____ not only saves space but also makes the process of updating data much simpler.	redundancy	☆
A(n) _____	many-to-many	☆

relationship means data can have multiple occurrences in both entities.		
___ is a property that lets you change the structure of the database without requiring you to change the programs that access the database.	Data independence	☆
A many-to-many relationship cannot exist in a relational database.	True	☆
A database is a physical storage device for data.	False	☆
A database has ___ if the data in it satisfies all established integrity constraints.	integrity	☆
The simplest approach to remove a **partial** dependency is to use each portion of the primary key to create separate tables.	True	☆
A(n) ___ is a person, place, object, event, or idea for which you want to store and process data.	entity	☆
Which of the following may contain transitive	first normal form (1NF)	☆

dependencies, but not partial dependencies? The ___ of an entity become the columns in the database table.	attributes	☆
Which of the following may contain **partial** dependencies, but cannot contain repeating groups?	first normal form (1NF)	☆
A(n) _____ is a group of related fields.	record	☆
A field in the logical design of a database is represented by what in the physical database?	column	☆
A(n) ___ is the computer counterpart to an ordinary paper file you might keep in a file cabinet or an accounting ledger.	data file	☆
Which of the following is an example of an attribute?	a person's hair color	☆
Which of the following is used to create and maintain the physical database?	Database Management System (DBMS)	☆
Unlike a typical data file, a database can store information about multiple ___.	entities	☆
An attribute is known as	False	☆

a row in most databases.		
In which step of the Systems Development Life Cycle (SDLC) are the logical and physical components defined?	systems design	☆
A field is referred to as a(n) _____ in the physical database.	column	☆
An entity is also defined as an attribute.	False	☆
There is a greater impact of failure in a nondatabase, file-oriented system.,	False	☆
A field in the logical design of a database corresponds to a row in the physical table of a relational database.	False	☆
What name is used to denote a common field that exists between two tables, but is also the primary key for one of the tables?,	foreign key	☆
Which of the following may contain repeating groups of data?	unnormalized data	☆