

DATABASE MANAGEMENT SYSTEMS

1. A _____ consist of a collection of interrelated data and a collection of programs to access that data
a)DML b)DDL **c)DBMS** d)DBA
2. The primary goal of DBMS is to provide an environment that is both ____ and _____ a)convenient b)efficient **c)both a and b** d)neither a nor b
3. A major purpose of a database system is to provide users with an _____ of the data.
a)abstract view b)data independence c)instance d)inconsistency
4. The overall design of the database is called _____
a)instance **b)database schema** c)query processor d)entities
5. A database schema is specified by a set of definitions that are expressed using_____
a)DML **b) DDL** c)URL d)DBA
6. The disadvantages of File processing systems are _____
a)Data redundancy and inconsistency b)Data isolation c)Atomicity problems
d)All
7. The ____ compiles and executes DDL and DML statements.
a)Query processor b)microprocessor c)client server system d)none
8. A _____ is a language that enables users to access or manipulate data
a)DDL **b)DML** c)Interpreter d)Compiler
9. The collection of information stored in the database at a particular moment is called an _____ of the database.
a)instance b)Record c)server d)none
10. The _____ is an example of record based model
a)relational model b)database c)ER model d)schema
11. _____ are described in a database by a set of attributes.
a)Entities b)Indices c)Data dictionary d)none
12. A _____ is an association among several entities.
a)Indices b)attributes **c)relationship** d)entities

13. A person who has central control over the system is called _____
a)DBA b)DDL c)DML d)none
14. A _____ is a program module that provide the interface between the low level data and the application programs submitted.
a)Task manager b)Disk manager c)Storage manager d)none
15. _____ which states metadata about the structure of the database, in particular of the schema of the database.
a)Data dictionary b)Data indices c)instance d)all
16. The first generations of Internet sites were collections of HTML files.
17. Boolean keyword searches ask for documents containing a specified Boolean combination of keywords.
18. Ranked keyword searches ask for documents that are most relevant to a given list of keywords.
19. URL- Universal Resource Locator.
20. HTML- HyperText Markup Language.
21. The World Wide Web or Web is the collection of web sites that are accessible over the Internet.
22. CGI- Common Gateway Interface.
23. Secure sockets layer is used to communicate with the client.
24. Extensible Markup Language is a markup language that was developed by remedy the shortcomings of HTML.
25. SGML- Standard Generalized Markup Language.
26. A **DTD** is a set of rules that allows us to specify our own set of elements, attributes, and entities.
27. The last part of an attribute declaration is called its Default Specification.
28. EDI- Electronic Data Interchange.
29. Database is a collection of documents and we call such a database as Text Database.

30. OEM- Object Exchange Model.
31. The select clause corresponds to the projection operation of the relational algebra.
32. Aggregate functions are functions that take a collection of values as input and return a single value.
33. Transaction rollback is useful if some error condition is detected during execution of a transaction.
34. We can define the duplicate semantics of an SQL query using multiset versions of the relational operators.
35. SQL supports several types of outer join with several types of join conditions.
36. SQL allows testing tuples for membership in a relation
37. To remove a relation from an SQL database we use the drop table command.
38. If we want to eliminate the duplicates, we insert distinct keyword.
39. The most commonly used operation on strings is pattern matching using the operator like
40. We define the escape character for a like comparison using the escape keyword.
41. SQL must perform a sort to fulfill an order by request.
42. We can use the special keyword null in a predicate to test for a null value.
43. The aggregate functions some and every can be applied on a collection of Boolean values.
44. The unique construct returns the value true if the argument sub query contains no duplicate tuples.
45. We define a view in SQL by using the create view command.
46. In a distributed database system, data is physically stored across several sites, and each site is typically managed by a DBMS.
47. Client-server, Collaborating server and Middleware are the three alternative approaches to separate functionality across different DBMS-related processes.
48. A Client-Server system has one or more client processes and one or more server processes.

49. A client process could run on a personal computer and send queries to a server running on a mainframe. Say true or false.
50. The middleware layer is capable of executing joins and other relational operations on data obtained from the other servers, but typically, does not itself maintain any data. Say true or false.
51. Fragmentation consists of breaking a relation into smaller relations or fragments, and storing the fragments.
52. In horizontal fragmentation, each fragment consists of a subset of rows of the original relation.
53. Replication means that we store several copies of a relation or relation fragment.
54. Local name and birth site fields identify a relation uniquely and the combination is called a global relation name.
55. Synchronous replication and Asynchronous replication are the two types of replication.
56. The transaction manager at the site where the transaction originated is called the coordinator for the transaction and its subtransactions execute are called subordinates for the transaction.
57. Three-Phase commit protocol can avoid blocking even if the coordinator site fails during recovery.
58. In a Middleware system, a special server allows coordination of queries across multiple databases.
59. Distributed catalog management is needed to keep track of what is stored where.
60. Semijoins and Bloomjoins reduce the number of tuples sent across the network by first sending information that allows us to filter irrelevant tuples.
61. A Relational database consists of a collection of, _____ each of which is assigned a unique name.
 a. Relations **b. Tables** c. data d. values
62. For each attribute, there is a set of permitted values, called the _____ of that attribute.
 a. Domain b relations c. tuple d. table
63. A domain is _____, if elements of the domain are considered to be invisible units.
 a. Permitted values b. Non-atomic c. atomic d. all

64. The concept of the relational schema corresponds to the programming -language notation of type definition.
65. The concept of relational instance corresponds to the programming language notation of a value of a variable.
66. A Superkey is a set of one or more attribute that allows us to identify uniquely a tuple in the relation.
67. A Query language is a language in which a user requests information from the database.
68. What are the two types of Query languages?
Procedural language and Non-procedural language.
69. List out the fundamental operations in relational algebra ?
Select, project, union, setdifference, Cartesian product and rename.
70. Aggregate function take a collection of values and return a single value as a result.
71. Decomposition that is unable to represent certain important facts about the bank enterprice is called lossy decomposition
72. Decomposition that is able to represent certain important facts about the bank enterprice is called lossless decomposition
73. A domain is Atomic if its elements of domain are considered to be invisible events
74. A relation schema R is in first normal form if domains of all attributes of R are atomic
75. The closure of F, denoted by F^+ is set of all functional dependencies logically implied by F
76. Axioms provide a simpler technique for reasoning about functional dependencies
77. Collection of rules to find logically implified functional dependencies is called Armstrong's axioms
78. F is a set of dependencies in F_c and F_c logically implies all dependencies in F is called canonical cover.
79. Functional dependencies are sometimes referred to as equality generating dependencies

80. Multivalued dependencies as referred to as tuple generating dependencis