

CS403 Quiz 1 Mcqs
Lecture 1 to 10
Spring 2022 #Mid-Term
WITH PROVE ANSWER
ORANGE MONKEY TEAM

Important NOTE:-

Maybe toppers are successful in school or college carrier but backbenchers are successful in their life because toppers run according to books while backbenchers don't follow rules and regulation that is why backbenchers are successful. For life, there are no books and another reason why toppers can't succeed because they fear failure and don't try anything new. Backbenchers don't fear failure as they have faced the failure in their school or college carrier so that is the reason they try new things and at last gain success.

As Abdul Kalam nicely quoted, "The best brains of the nation may be found on the last benches of the classroom"

Translation into Urdu:

ORANGE MONKEY TEAM

ہوسکتا ہے کہ ٹاپر اسکول یا کالج کیریئر میں کامیاب ہوں لیکن بیک بینچر اپنی زندگی میں کامیاب ہوتے ہیں کیونکہ ٹاپر کتابوں کے مطابق چلتے ہیں جبکہ بیک بینچر قواعد و ضوابط پر عمل نہیں کرتے ہیں اسی وجہ سے بیک بینچر کامیاب ہوتے ہیں۔ زندگی کے لیے، کوئی کتابیں نہیں ہیں اور ایک اور وجہ ہے کہ ٹاپرز کامیاب نہیں ہو پاتے کیونکہ وہ ناکامی سے ڈرتے ہیں اور کچھ نیا کرنے کی کوشش نہیں کرتے۔ بیک بینچر ناکامی سے نہیں ڈرتے کیونکہ انہوں نے اپنے اسکول یا کالج کیریئر میں ناکامی کا سامنا کیا ہے یہی وجہ ہے کہ وہ نئی چیزیں آزما رہے ہیں اور آخر کار کامیابی حاصل کرتے ہیں۔

جیسا کہ عبدالکلام نے اچھی طرح سے نقل کیا ہے، "قوم کے بہترین دماغ کلاس روم کے آخری بینچوں پر مل سکتے ہیں۔"

inconsistency in the **database levels**. The changes which can be done transparently may include the following:

- Adding a file to the database
- Adding a new field in a file
- Changing the type of a specific field



1. Which of the following change can cause problem in database levels?

Deleting an attribute from the database structure.....confirm

inconsistency in the **database levels**. The changes which can be done transparently may include the following:

- Adding a file to the database
- Adding a new field in a file
- Changing the type of a specific field

2. In data based development process which of the following is related to requirement gathering phase.

Detailed study of system....confirm

flows between those sections. **Detailed study of** the system is started to find out the requirements of each section. This phase is the **detailed study of** the system and its functionality decisions made at this stage decide the overall activity of the organization. Requirements of one section of the organization are fulfilled in such a way that all the sections in the organization are supporting each other, for example we can say that the results produced by the processing taking place at one section are used as input for another section. All the users of the systems are interviewed and observed to pinpoint and precisely define the activities taking place in the different section of the organization.

Database Development Process

3. Which of the following is correct about database modeling?

Process of creating the logical structure of the database.....confirm

The process of creating the logical structure of the database is called **database modeling**.

4. A relationship is an association between two entities or between an entity and itself. The diamond symbol for a relationship is _____ if one of the participants is dependent on the other.

Doubled.....confirm

Diamond is doubled if one of the participant is dependent on the other

5. Which of the following is incorrect related to secondary key?

Selected key must be unique identifier.....confirm

6. In database system the description and definition of data is stored in _____.

Schema....confirm

A database generally stores its schema in a data dictionary.

Although a schema is defined in text database language, the

7. A candidate key that does not have a null value and is selected to uniquely identify all other attribute values in any given row is called a _____.

Primary key....confirm

A certain value that may be associated with any attribute is NULL, that means "not given" or "not defined". A major characteristic of the PK is that it cannot have the NULL value. If PK is a composite, then none of the attributes included in the PK can have the NULL, for example, if we are using "name, fName" as PK of entity type STUDENT.

8. Which of the following is Not related to the management of data in the database?

How data will be transformed.....confirm

- Management of Data in the Database
- Management of Users associated with the database.

Management of the data means to specify that how data will be stored, structured and accessed in the database.

9. In entity-relationship diagram the entity type which has existence dependency constant is classified as:

Weak entity.....confirm

Que. In entity-relationship, the entity type which has existence dependency constraint is classified as

- a. single entity
- b. foreign entity
- c. weak entity
- d. strong entity

Answer: weak entity

10. Which of the following to the semantic Data Model?

E-R data model.....confirm

Developed in a semantic data model
(generally E-R data model)

11. Detailed data flow diagram is created for only those processes from the _____ for which we want to show the details.

Level 0 diagram.....confirm

DFDs. The special features associated with this diagram are that, one, it is optional, that is, it is created for only those processes from the level 0 diagram for which we want to show the details. For a small sized system we may not need to develop even a single

12. The total participation by entities is represented in E-R diagram as:

Double line.....confirm

13. Which of the following is the major drawback of file processing system?

Non-sharing of data

Another major drawback in the traditional file system environment is the non-sharing of data. It means if different systems of an organization are using some common data then rather than storing it once and sharing it, each system stores data in separate files. This

14. A relationship that involves three entities called.

Ternary relationship....confirm

○ Ternary Relationship

A Ternary relationship is the one that involves three entities e.g.

15. The entity relationship model consists of the following major constructs

_____.
Entity, Attribute and relationship.....confirm

Constructs in E-R Data Model

The E-R data model supports following major constructs:

- Entity
- Attribute
- Relationship

16. The DBMS uses the _____ to access the database at each layer or model.

Data Dictionary.....confirm

The DBMS uses the data dictionary to access the database at each layer or model, f

17. Which of the following is the best description of the data security in DBMS?

Efficient Check on all users access.....confirm

○ **Better Data Security:**

All application programs access data through DBMS, So DBMS can very efficiently check that which user is performing which action and accessing which part of data , So A DBMS is the most effectively control and maintain security of Data stored in a database.

18. Consider the following tables

EMP(empId, empName, qual, depId)

DEPT(depId, depName, numEmp)

The primary key of EMP table is _____ whereas foreign key of EMP table is _____.

EmpId, depId

19. Which of the following Greek letter is used to denote the select operation?



() Greek sigma symbol.....confirm

3. Which of the following is used to denote the selection operation in relational algebra?

- a) Pi (Greek)
- b) Sigma (Greek)
- c) Lambda (Greek)
- d) Omega (Greek)

[View Answer](#)

Answer: b

20. In relational data model, a record or an entity instance is represented as _____ in a relation.

Row...confirm

table consists of rows and columns. Rows of a table are also called tuples. A row or tuple of a table represents a record or an entity instance, where as the columns of the

21. While mapping many-to-many relationship _____ table(s) are created.

Three

22. Select and project are the examples of _____.

Unary Operation.....confirm

: "Select" and "project" are the examples of
Select correct option:

Unary operations
Binary operations

23. In natural join the common attribute in the output table appears _____.

Once.....confirm

In natural join the common attribute in the output table appears _____.

- Twice
- Three times
- Four times
- **Once**

24. RDM is simple there is just one structure and that is _____.

a Relation or a table....confirm

The RDM is simple, why, there is just one structure and that is a relation or a table.

25. RDM stands for _____.

Relational Data model....confirm

relational data model (**RDM**),

26. Which of the following constant states that if a foreign key exists in a relation either the foreign key value must match the primary key value of some tuple in its home relation or the foreign key value must be completely null?

Referential Integrity Constraint....confirm

Referential Integrity Constraint:

This constraint is applied to foreign keys. Foreign key is an attribute or attribute combination of a relation that is the primary key of another relation. This constraint states that if a foreign key exists in a relation, either the foreign key value must match the primary key value of some tuple in its home relation or the foreign key value must be completely null.

27. Which constraint is generally used for efficiency purpose in the data entry process.

Default value.....confirm

Default Value:

This constraint means that if we do not give any value to any particular attribute, it will be given a certain (default) value. This constraint is generally used for the efficiency purpose in the data entry process. Sometimes an attribute has a certain

28. The relationship between department to employees is .

One to many....confirm

In the second part of the Figure-1 we see a relationship between the Employee and project entities, the relationship describes one to many association between the project and the employees. It shows that there can be one project having a number of employees,

29. A row of a table represents a _____ whereas the column of the table represents the _____.

Record, Attribute....confirm

A row of a table represents a _____, whereas the column of the table represents the

_____.

Answer: Record, attribute

30. Which is not the function of Database Management System?

Failure Response Service

31. The conceptual database design can be transformed into any .

Data model

32. Which of the following is the second stage in the database development process?

Requirement Analysis

33. Functional dependencies under interference rule reflexivity are called dependencies.

Trivial

34. If many instances of the “Book” entity are associated with the many instances of the “Student” entity, then the relationship between them is:

Many to many

35. Which of the following constraints enforces entity integrity?

PRIMARY KEY

36. Unary operations involves

Only one relation

37. A _____ entity has a primary key that is partially or totally derived from the parent entity in the relationship.

Weak

38. Business

Relationship

39. In _____ appropriate data model is chosen.

Logical Database Design

40. Which of the following is drawback of standardization?

Lack of uniqueness

41. Recursive relationship is also called _____.

Unary

42. The foreign key attribute, which is present as a primary key in another relation is called as _____

of the foreign key attribute.

43. Binary relation _____

Home relation

44. DFD does not provide us a way to represent _____

Decisions

45. A _____ is used to maintain a connection between the users of the database system.

File server...confirm

46. Which of the following is an advantage of using the Traditional File Organization?

Simplicity

47. Which of the following is the input to Analysis Phase?

DFD

48. Name and _____ are part of the definitions of an attribute.

Domain

49. Which of the following most certainly implies the need for an entire table to implement?

A ternary relationship

50. Core of the Database Architecture is

Internal level

51. _____ is same as equi-join with a slight difference.

Natural join

52. Which of the following database environment causes a network overhead?

File server.....confirm

desired operation on the desired data wants to write back the data on the database he will have to send the whole file back to the server, thus causing a lot of network overhead. The Good thing

53. Conceptual database design is implemented using a _____.

Semantic data model

54. Which constraint is generally used for efficiency purposes in the data entry process?

Default value

55. A 3 NF relation is converted to BCNF by

Dependent attributes of overlapping composite keys are put in a separate relation

56. Each _____ of a table contains atomic/single value.

Cell

57. A relation is said to be in BCNF when

It has no overlapping composite keys which have related attributes

58. Which one of the following is not a part of three-level architecture?

Physical level

59. Which of the following is INCORRECT about naming entities?

Always use abbreviations as they are convenient

60. An instance is

Any particular entity

61. _____ is an example of metadata

Student

62. Level of data at which entities or objects exist in reality is called

Real world data

63. There are _____ basic properties of the database relations.

Six

64. How many types of dependencies are?

Three...(existence dependency, Identifier dependency, referential dependency).....confirm

65. In _____ join, only selected rows of a relation are made cross product with second relation.

Theta

66. Which of the following is not a key?

Integrity constraint key....confirm

- Super Key
- Candidate Key
- **Primary Key**
- Alternate Key
- Secondary Key
- Foreign Key

67. A collection of concepts that can be used to describe the structure of a database

Data model

68. Any combination of attributes with super key is

Super key

69. Binary relationships are those, which are established between

Two entity type

70. _____ are called participants, when enrolled in a relationship.

Entities

71. Incase of Context-level Diagram, the system is represented by

One process only

72. Collection of raw facts is called _____.

Data

73. A software package designed to store and manage database

DBMS

74. In _____ join common attributes appear twice in the output with selected rows.

Equi join

75. Within a table, each primary key value _____.

Must be unique.....confirm

Within a table, **each primary key** value ____.

Select correct option:

is a minimal superkey

is always the first field in each table

must be numeric

must be unique

76. Must be numeric

Must be unique

77. _____ is not an operation of relational algebra.

Addition

78. Candidate keys which are not selected as primary key are called

Alternate keys

79. Internal schema/view defines the ____ of the data.

Structures...confirm

Internal schema or view defines the structures of the data :

80. Major benefits of data sharing is:

Data of different application places at same place

81. Functional dependency between two attributes or sets of attributes i.e. Q and P is represented as .

$Q \rightarrow P$

82. Which of the following is not the component of Relational Data Model?

Manipulation Language

83. The attribute that is calculated from other attribute is called .

Derived attribute

84. Consider the two attributes “CNIC_NO” and “Registration_NO”. Both the attributes can be used for the unique identification. Now if the user selects the “CNIC_NO” as primary key, then “Registration_NO” is a _____ key.

Alternative

85. Which of the following constraint is included in the definition of the table?

Null

86. The database deals with large amount of data. This property is called

Scalability

87. Which one of the following is NOT a characteristic of meta data?

Includes user data.....confirm

88. Theta join is denoted mathematically as .

$R \bowtie S$

89. In cross reference matrix transitions are specified on _____ and database objects are specified on _____.

X axis, Y axis

90. Each component of DBMS performs _____ functions.

Different

91. Which of the following data model is not record based?

Hierarchical Data Model

92. Network Data model

Semantic Data model

93. The basic purpose of diamond in ER diagram is to show the _____.

Relationships

94. Which of the following tool is used to design conceptual database design?

This model is independent of any tool

95. In “one to many” cardinality one instance of a relation is mapped.

Many instances of second entity type

96. Cross reference matrix is developed at the _____ stage of the database.

Designing

97. User rights information is stored in

Catalog

98. Which of the following is incorrect about attributes?

One entity type may have two attributes with same name.....confirm

An attribute is identified by a name allocated to it and that has to be unique with respect to that entity type. It means **one entity type** cannot have two attributes with the same name. However, different entity types may have attributes with the same name. The guidelines for naming an attribute are similar to those of entity types. However, one

99. Logical data independency provides independency to change _
model.

Conceptual

100. In natural join the common attribute in the output table appears

.

Once

101. Which levels are mostly used for detailed DFD?

Level-0, Level-1.....confirm

102. By default, a non-key attribute in a relation can have _____ value.

Null

103. The three levels architecture is useful for _____ .

Hiding the details of internal systems

104. With the help of _____ technique data values with the smaller sized codes can further reduce the space needed by the data for storage in the database.

Compression

105. If an entity is linked with itself, than it is called _____ relationship.

Recursive

106. Duplication of data in controlled redundancy is controlled and _____ .

Deliberate.....confirm

107. Teleprocessing is a sub-type of _____ .

Multi-user database

108. In an ERD, the focus is on the _____ and the relationships between them.

Entities

109. The most widely used conceptual model is the _____ model.

ER

110. Student and book are two entities, what is the cardinality between the two?

Many to many

111. RDM is a simple there is just one structure and that is _____ .

A relation or a table

112. A description on a particular collection of data using the given data model.

Database

113. Consider thy key “CNIC, Name” and choose the best option that describes the key most effectively.

The given key is a super key and candidate key as well.

114. Normalization is a process of restricting a relation to

Minimize duplication of data in a database

115. Unary relationship involves a single entity it is also called _ .

Recursive relationship....confirm

Unary Relationship

These are the relationships, which involve a **single entity**. These are also called recursive relationships. Unary relationships may have one to one, one to many and

116. Which of the following is a part of a DFD but not included in the ERD?

The external entity having a single instance

117. The database management system (DBMS) is used to

All of above

118. In cross reference matrix attributes are mention on _____ and reports are mention on

X axis, Y axis

119. A table can be logically connected to another table by defining a _____.

Primary key.....confirm

Explanation : A table can be logically connected to another table by defining a **Primary Key**.

120. In the relation model, the number of attributes and number of tuples in a relation are termed as _____ and _____ respectively.

degree, cardinality

121. The function that an entity plays in a relationship is called that entity's _____.

Role

122. A database system is designed to meet the information needs of _____ in an organization.

Multiple users

123. Which of the following is the example of a strong entity?

Ahmad account of ABC bank has no existence if the ABC bank doesn't exist anymore

124. Which of the following is a completeness constraint?

Partial Completeness Constraint

125. In an employee entity which of the following attribute will work as a primary key?

Employee id

126. _____ is the first computer-based approach for handling the commercial or business applications

Database Systems

127. Which of the following is NOT the classification of entity type?

Dependent entity type

128. Which of the following is NOT the type of key?

Derived key

129. Data Redundancy means

Duplication of data

130. Which of the following is a type of dependency?

Referential

131. In your opinion, why relational database is widely acceptable?

Due to its dependencies

132. is the first comprehensive complete database design.

Conceptual database design

133. How data security can be assured in the database?

Implementing encryption algorithms

134. The attributes whose value is not stored in a database is known as _
attribute.

Derived....confirm

135. Logical database design, like conceptual database design is our

Database design

136. If a single instance of “student” is associated with the many instances of the
“subjects” entity, then the relationship between them is:

One to many

137. The conceptual database design is drawn through .

ER model

138. A relational database is

One that consists of two or more tables that are joined in some way .

139. Data, information

Information, data

140. In which stage of the database development process logical design is created?

Implementation

141. Which of the following is NOT an entity?

Playground

142. After moving the determined columns from the original table to the new
table while converting to 2NF, the determinate becomes the of the new table.

Primary key

143. **Binary operator**

Project operator

144. **Free standing data dictionary is created by**

CASE tools

145. **A patient can be an outdoor or indoor. Analyze this statement and tell what type of constraint will be applied on patient?**

Total completeness

146. **If $A \rightarrow B$ and $A \rightarrow C$, then $A \rightarrow BC$. The inference Rule applies is:**

Union

147. **Which of the following is the correct abbreviation of ERD?**

Entity relationship diagram

148. **Database relation is also represented in a two dimensional structure called**

Table

149. **Which of the following specifies the number of instances of one entity that can or must be associated with each instance of another entity?**

Cardinality view.....confirm

Recalling from the previous lecture we can say that that cardinality is just an expression which tells us about the number of instances of one entity which can be present in the second relation. Maximum cardinality tells us that how many instance of an entity can be placed in the second relation at most. Now we move onto discuss that what the minimum

150. Data about data is metadata

True

151. Which of the following describes the job of a database administrator?

Monitoring and controlling database security and authorization: setting up controls to ensure the quality and integrity of data....confirm

152. Each table must have a _____ key.

Primary

153. A relational database system is based on the concept(s) of:

Tables, row and columns

154. $A \rightarrow BC$ and $A \rightarrow B$, then $A \rightarrow C$ follow _____ inference rule.

Projectivity

155. Suppose, we have two entities “shape” and “triangle”, then which of the following is a correct statement?

Shape is a super type entity and triangle is a sub type entity

156. The entity that is NOT dependent on any other entity for its existence is known as _____ entity.

Strong

157. In cross reference matrix attributes are specified on

X axis

158. Which of the following clarify the semantics of a relationship?

Roles

159. How many types of cardinality is specified about relationship?

Four

160. Which of the following is NOT a component of a DFD?

Relationship between external entities

161. Which of the following provides us the facility to add properties of one entity to another entity automatically?

Inheritance

162. If there is more than one relationship between two entities and we mentioned role on the relationship link, then it is called:

Multiple relationships

163. Which one of the following is not an advantage of DBMS

Recovery procedure is difficult

164. In many to many relationship a third table is created for the relationship, which is also called as _

Associative entity type

165. When one entity instance of another entity for its existence, then it is called

Existence dependency

166. Relational data model is widely accepted due to its mathematically proven foundation and its

Simplicity

167. If an entity “motor cycle” is associated with at most one “driver”, then the relationship between these two entities is:

One to one

168. Database application is a program which is used for performing certain operations such as

Insertion of data, Extraction of data, Updating the data....All of above

169. Creating the relationships between new tables and their predecessors through the use of foreign keys is general requirements of

Second normal form

170. In the domains of attributes of a relation are atomic, that is they consist of single units that cannot be broken down further.

First normal form

171. Atomicity is a feature of .

1NF

172. The _____ can see entire information structure of the database.

DBA

173. The attribute whose value is not stored in a database is known as attribute.

Derived

174. are the structure defined for placing data in the attributes while designing physical design of database.

Data types

175. Suppose a relation has five columns and ten rows, select the correct option to identify cardinality of relation.

Ten....confirm

130. Suppose a relation has five columns and ten rows, select the correct option to identify cardinality of relation.

- a) Five
- b) Ten

176. Which feature of database provides conversion from inconsistent state of DB to a consistent state ensuring minimum data loss?

Recovery service

177. Consider an employee is allotted an organization vehicle, which might solely be driven by that employee. What kind of relationship exists between employee and company?

Many to one

178. Which of the following is a feature of CHECK constraint?
used to enforce referential integrity

179. Which of the following semantic model is used for the graphical representation to the conceptual database design?

Entity Relationship (ER)

180. Suppose we have two entities department and University. Which type of dependency exists between these two entities?

Referential (Not sure)

181. _____ is the next stage of conceptual database design.
logical database design

182. The _____ model is independent of any tool or data model.

Entity Relationship (ER) (page 122)

183. While converting to 2NF all the columns are deleted from the original table except for the determinate which will serve as a _____ key.

Primary key

184. In relational algebra, which of the following operator is used to find tuples that are present in one relation but are not in another?

Union

185. Subject may be the prerequisite of another subject, is the example of _____ relationship.

Unary (google)

186. The maximum PL/SQL size of data type "VARCHAR2" in DBMS is
bytes a)

32767

187. _____ is state of database where a "course" cannot be inserted in the table, because this course has not been registered to any "student".

Insertion anomaly

188. The maximum PL/SQL size of data type “BLOB” in DBMS is

4 gigabytes

189. states that in a relation no attributes of a primary key (PK) can have a null value.

Entity integrity constraint

190. A database state where deletion of the information about the student record deletes the course information as well is called .

Deletion anomaly

191. An entity type is

A coherent set of similar objects that we want to store data on (e.g. STUDENTS, COURSE, CAR)

192. External scheme evolves as user needs are ____ over the time.

Modified

193. An attribute that is the collection of some other attribute(s) is known as _ attributes.

Composite

194. Which of the following is correct regarding Dataflow diagram?

Created at increasing levels of detail

195. Used to represent the relationships among the external entities are those attributes that are a combination of two or more than two attributes.

Composite attributes

196. Controlling redundancy in a database management system DOES NOT help to

avoid unauthorized access to data

197. Which of the following concepts is applicable with respect to 3NF?

Transitive dependency

198. Identify the operation which is NOT one of the parts of the five basic set operations in relational algebra?

Join

199. Making a change to the conceptual schema of a database but not affecting the existing external schemas is an example of

Logical data independence.

200. For a third normal form we concentrate on relations with one _____ key, and we eliminate transitive dependencies

Candidate

201. The entity relationship diagram is used to graphically represent the database model.

Conceptual

202. The _____ determines that the link between two entities is optional or mandatory.

Minimum cardinality

203. Select the most appropriate statement. Which of the following data model is used to design logical database design?

Relational

204. _____ are used by database administrator in situations where we have large number of records and wastage of small amount of space in each record can lead to loss of huge amount of data storage space.

Codes

205. An attribute in a relation is foreign key If the _____ key from one relation is used as an attribute in that relation.

Primary....confirm

The **foreign key** attribute, which is present as a primary key in another relation is called as home relation of **foreign key** attribute, so in EMP table the deptId is foreign key and its home relation is DEPT.

The **foreign key** attribute and the one present in another relation as primary key can

206. in data flow diagram which of the following operator is used, when data flows from a source process to one of the mentioned sinks?

Ring Sum Operator

207. The _____ rule specifies that an entity can be a member of only one subtype at a time.

disjoint page no 108

208. In relational algebra, which of the following Greek is used to represent the project operator?

Π (PI) (page no 150)

209. In three level architecture of the database, which level is helpful to display data which is not actually placed in the database?

External Level....confirm

External View (Level, Schema or Model):

External views are also helpful when we want to display the data which is not place in the database or not stored at all.

210. Which of the following normal forms deals multivalued dependency?

4NF

211. While mapping _____ relationship, primary key of the entity type against one side of relationship will be included in the entity type on the many side of the relationship as foreign key.

one to many

212. In data flow diagram _____ symbol is used to represents data flows.

arrow (google)

213. In the below entity type which attribute can work as an alternate key?

Employee (Reg# Primary key, Name, CNIC, designation, address, phone)

CNIC

214. From the following who is responsible for proper working of the database and DBMS?

Database administrator

215. Suppose that “Program” is an entity which represents different courses are being offered by an institute, like MCS. BCS etc. Following are the major attributes of this entity. Identify the attribute which can be used as primary key.

program_Code

216. The following is an of _____ inference rule.

If stId $\rightarrow$ prName and prName $\rightarrow$ credits then stId $\rightarrow$ credits

Transitivity

217. Which of the following is the example of a weak entity?

The tire can exist without being attached to the car

218. In Relational Data Model, the _____ of a relation is the number of columns in that relation

Degree

219. Which of the following normal form deals with possible loss less decompositions?

5NF

220. Suppose we have a list of bank customers which availed loan facility from different branches of a bank. If we want to get a list of all customers and the amount of the loans excluding branch name. Which of the following operation allows us to generate this relation?

Union

221. Which of the following provides us data independency?

3-Level Architecture

222. Cross reference matrix is a tool available in the data dictionary, which helps us in finding ____.

Entities of the database and their associations

223. Conceptual database design, expressed in E-R data model can be implemented using any _____.

Database Management System (DBMS)

224. Which of the following might be represented with a single-valued attribute?

Computer's processor speed

225. Which of the following is a Unary operation?

Project

193. Which of the following data model has the following components?

ORANGE MONKEY TEAM

1. Construct (Tables)
2. Manipulation language (SQL)
3. integrity constraints?

Relational

226. Which of the following Greek is used to represent the select operation?

σ (page 149)

227. Data about data is called metadata.

True (page no 10)

228. Normalization of database is used to _____.

Eliminate redundancy

229. In student entity which of the following is the best example of multivalued attribute?

Email address

230. Theta join is denoted mathematically as

$R \bowtie_{\theta} S$

231. In which normal form, we convert composite attributes into individual attributes?

1NF

232. Which of the following tool is used to graphically represent the components and design of the system?

DFD

233. Data type “BLOB” in database management system stands for _____.

Binary Large Object (page no 185)

234. In a three level DBMS architecture, the _____ level interacts directly with the users.

External

235. In the Database System _____ provides many features to ensure the data integrity.

Database Management System (DBMS)

basis of information produced from the database and the wrong information leads to wrong decisions, and business collapse. In the database system environment, DBMS provides many features to ensure the data integrity, hence provides more reliable data

236. The process of defining one or more subtypes of a super and forming relationships is known as

Generalization

237. External scheme evolves, as user needs are _____ over the time.

Switch

238. _____ of the Database is most difficult to change when a database is created.

Extension

239. In Database development process, which phase involves designing of any new application for the enhancement of the system?

Maintenance phase....confirm

240. An attribute of one entity is associated with another attribute of the same entity is called:

Recursive relationship....confirm

Recursive Relationship:

This is the situation when any attribute of one entity is associated with another attribute of the same entity. Such a link initiates from one entity and terminates on the same entity.

241. Relational Data model is created in the _____ phase.

Analysis

242. Database system saves lots of efforts and finances, this advantage provides _____.

Time saving structure

243. Data inconsistency leads to a number of problems such as _____.
loss of information and incorrect results

244. Every primary key (PK) will be a candidate key and every candidate key will be a _____.

Super key

245. If we want to include attributes from two different relations, which of the following operations will be used?

Union

246. When have two entities "Person" and "Doctor. Which of all is best suitable type of relationship between the mentioned entities?

Inheritance.....confirm

We have two **Raise For Success** entities "Person" and "Doctor". Which of the following is best **suitable type of relationship** between the mentioned entities?

- **Inheritance Correct**