

Explain the following constraints : i. Entity integrity constraint. ii. Referential integrity constraint. iii. Domain constraint.

### Entity Integrity Constraint:

- Rule: No primary key attribute can have a null value.
- Example: In the table where SID is the primary key, every SID must have a value. So, having a null value for SID is not allowed.

SID	Name	Class (semester)	Age
8001	Ankit	1st	19
8002	Srishti	1st	18
8003	Somvir	4th	22
8004	Sourabh	6th	A

### Referential Integrity Constraint:

- Rule: If a foreign key in one table refers to the primary key in another table, every foreign key value must either be null or exist in the referenced table.
- Example: In the second table, the DNO (Department Number) is a foreign key that refers to the DNO in the third table. Every DNO in the second table must be either null or match a DNO in the third table.

ENO	NAME	Age	DNO
1	Ankit	19	10
2	Srishti	18	11
4	Sourabh	22	14

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DNO	D.Location
10	Rohtak
11	Bhiwani
12	Hansi

### Domain Constraints:

- Rule: Specifies the allowed set of values for an attribute based on its data type.
- Example: If the Age attribute is defined as an integer, then every value in the Age column must be a valid integer.

SID	Name	Class (semester)	Age
8001	Ankit	1st	19
8002	Srishti	1st	18
8003	Somvir	4th	22
8004	Sourabh	6th	A

These constraints help maintain the accuracy, consistency, and reliability of data in a database.

### Related posts:

1. What is database management system (DBMS) ? What are the tasks performed by users in DBMS ?
2. What are the advantages and disadvantages of DBMS ?

Explain the following constraints : i. Entity integrity constraint. ii. Referential integrity constraint. iii. Domain constraint.

3. What do you understand by database users ? Describe the different types of database users.
4. Who are data administrators ? What are the functions of database administrator ?OR Discuss the role of database administrator.
5. What is data abstraction ? Explain different levels of abstraction.
6. Explain the differences between physical level, conceptual level and view level of data abstraction.
7. Explain the difference between database management system (DBMS) and file system.
8. Discuss the architecture of DBMS. What are the types of DBMS architecture ?
9. What are data models ? Briefly explain different types of data models.
10. Describe data schema and instances.
11. Describe data independence with its types
12. Describe the classification of database language. Which type of language is SQL ?
13. Explain DBMS interfaces. What are the various DBMS interfaces ?
14. What is ER model ? What are the elements of ER model ? What are the notations of ER diagram ?
15. What do you understand by attributes and domain ? Explain various types of attributes used in conceptual data model.
16. Construct an ER diagram for University system.
17. Construct an ER diagram for the registrar's office
18. Explain the primary key, super key, foreign key and candidate key with example. OR Define key. Explain various types of keys.
19. What do you mean by a key to the relation ? Explain the differences between super key, candidate key and primary key.
20. Explain generalization, specialization and aggregation. OR Compare generalization, specialization and aggregation with suitable examples.
21. What is Unified Modeling Language ? Explain different types of UML.

Explain the following constraints : i. Entity integrity constraint. ii. Referential integrity constraint. iii. Domain constraint.

22. What is relational model ? Explain with example.
23. Explain constraints and its types.
24. Consider the following relations:
25. What are the additional operations in relational algebra ?
26. Explain integrity constraints.
27. Describe mapping constraints with its types.
28. Explain how a database is modified in SQL. OR Explain database modification.
29. Discuss join and types with suitable example. Define join. Explain different types of join.
30. Describe the SQL set operations