INTEGRITY CONSTRAINT IN DBMS

Integrity constraints help to ensure that data remains reliable and meaningful throughout its lifecycle.

Types of Integrity Constraint:

- **Domain Integrity Constraint**
- **Entity Integrity Constraint**
- **Referential Integrity Constraint**
- **Key Constraint**
- **Check Constraint**
- **Null Constraint**
- **Unique Constraint**
- **Default Constraint**

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Domain Integrity Constraint

It ensures the validity and appropriateness of data values
(i.e valid data types, ranges, and formats for columns)
within a specific column or attribute of a table.

Ex-> Check for date column so that it contains valid date values

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Entity Integrity Constraint

It ensures that each row/record in a table is uniquely identified by a primary key.

It also helps in preventing duplicate or null values in the primary key.

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Referential Integrity Constraint

It ensures that values in a foreign key column match with the values in the corresponding primary key column in another table.

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Key Constraint

It ensures uniqueness for the primary key.

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Check Constraint

It checks for a condition that each row in a table must satisfy.

If the condition is not met, the insertion or update of the row is rejected.

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Null Constraint

It determines whether a column in a table can have null (i.e., missing or unknown) values or not.

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Unique Constraint

It ensures that values in a specified column or combination of columns are unique across a table.

This constraint prevents duplicate values from being inserted into the specified column(s), maintaining data consistency and integrity.

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Default Constraint

It ensures a default value for a column, which is used if no other value is provided