The LNM Institute of Information Technology, Jaipur

IDBMS Lab

Assignment 3- Data Definition Language

This assignment is to learn how to add and remove PRIMARY KEYS, FOREIGN KEYS, UNIQUE constraint, change the COLUMN NAME, and change the DATA TYPE of column in the tables.

Create a database named test having 3 tables namely, people, address, and pets. Decide the appropriate data type for each attribute of the tables.

i.   addresses (*addressID, HouseNumber, City, PostCode)*

ii.   people (*peopleID, FirstName, LastName, addressID*)

iii.   pets (*petID, Name, Species, ownerID*)

After creating the database perform the following operations on the created tables.

1. Add *addressID* in addresses table as PRIMARY KEY.
2. Remove *addressID* in addresses table as PRIMARY KEY. (Add it again)
3. Add *peopleID* and FirstName as composite PRIMARY KEY in people table.
4. Add constraint FOREIGN KEY to *addressID* of the people table referencing to *addressID* of addresses table.
5. Remove FOREIGN KEY constraint from *addressID* of the people table referencing to *addressID* of addresses table.
6. Add UNIQUE constraint to *Species* attribute of pets table.
7. Remove UNIQUE constraint from *Species* attribute of pets table.
8. Change the column name *Species* to *AnimalType*.
9. Change the data type of *City* column of table addresses to VARCHAR (50).

Additional Practice queries:

10. Add *petID* as PRIMARY KEY to pets table.
11. Add a FOREIGN KEY to the *ownerID* field in the pets table referencing to the *peopleID* field in the people table
12. Add column named *email* to the people table.

13. Add a UNIQUE constraint to the *email* column in the people table.
14. Rename the *Name* column in the pets table to *FirstName*.
15. Change the *PostCode* data type to CHAR(7) in the addresses table.

(NOTE: Use DESCRIBE <table name> to see the changes after every query)

Reference Material:

1. https://www.w3schools.com/sql/sql_default.asp
2. https://www.w3resource.com/sql/tutorials.php