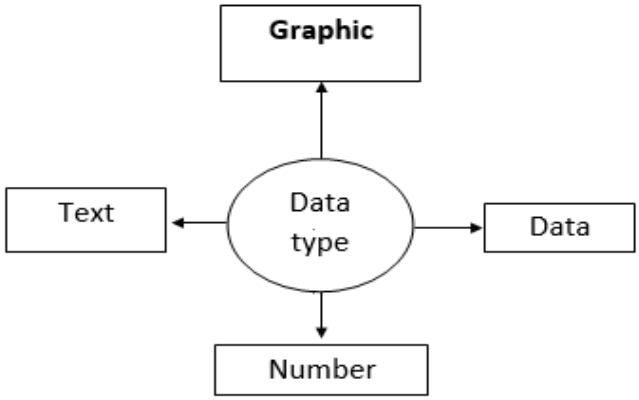
Chp.2 Introduction to DBMS.

Q.1 Complete the following activity:

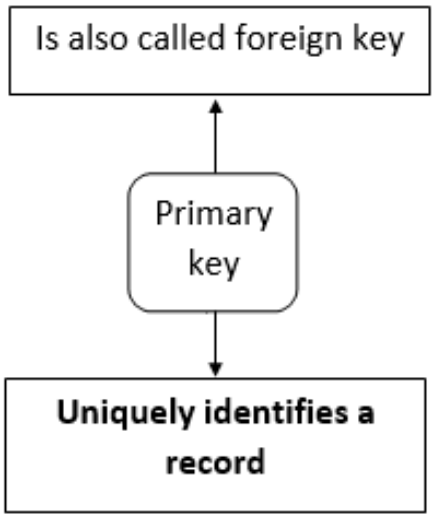
1. Tick whichever box is not valid.



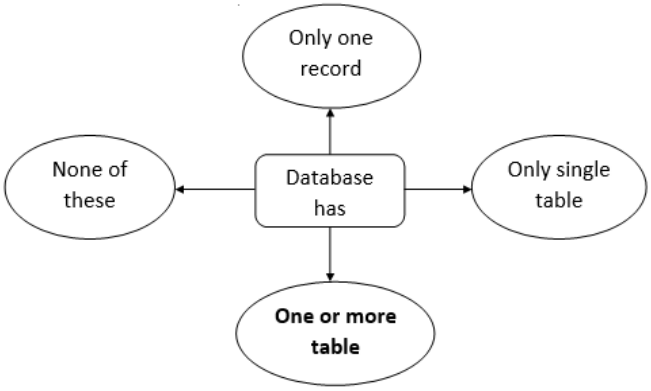
2. Student wants to create a field pincode in a table, which data type he will choose?

Ans: INT

3. Tick the appropriate box.



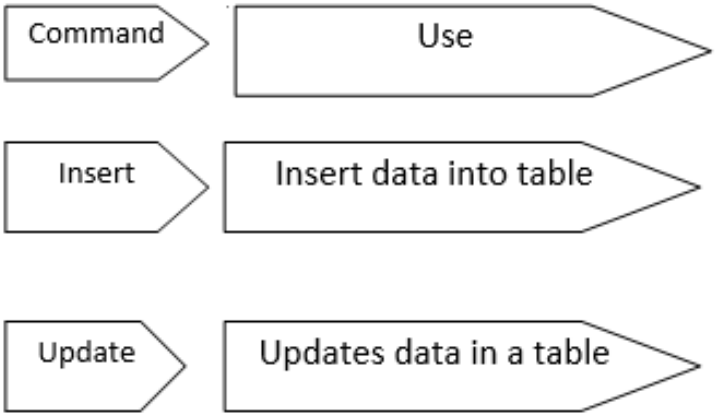
4. Tick the appropriate circle.



Q.2 Observe the field names of a database given below in 'Column A' Related to bus reservation. Write suitable data types foe each field in front of the respective field in 'Column B'.

Column A (Field name)	Column B (Data Type)
Passenger name	Text
Age	Int
Gender	Text
Mobile number	Int

Q.3 Write the use of the following SQL command.



Q.4 Create a table for the information given below by choosing appropriates data types. Specify proper primary key for the table (1) Movie (2) Actor

1. Movie (Registration_no, movie_name, Release_date)

2. Actor (Actor_id, Actor_name, Birth_date)

Ans:

1. Create table movie
(Registration_no smallint primary key,
Movie_name varchar (20),
Release_date Date):
2. Create table actor
(Actor_id smallint primary key,
Actor_name Varchar (20),
Birth –date date):

Q.5 Consider the following table stationery, Write the SQL command for the following statement.

Table: stationary

S_ID	S_Name	C_Name	Price	Quantity
001	Note book	ABC	20	50
002	Pencil box	XYZ	10	80
003	A4 pages rim	PQR	600	2

1. Write the SQL command to create the above table.

Ans:

Create table stationary
(S_ID Smallint primary key,
S_name varchar (20),
C_name varchar (20),
Price smallint
Quantity smallint):

2. Write SQL command to insert above mentioned record in a table
Ans:
Insert into stationary values
(001, 'Notebook' 'ABC', 20, 50),
(002, 'Pencil box' 'XYZ', 10, 80),
(003, 'A4 Pages Rim' 'PQR', 600, 2),

3. To delete above data:
Ans: Drop table stationary:

Q.6 Answer the following question:
1. What is database?
Ans: A DBMS is a collection of programs (computer based system) that enables the user to create and maintain a database it is used to define, construct and manipulate the data in the database for various applications. It provides information storage, organization and retrieval capabilities. The DBMS also enforces necessary access restrictions and security measures in order to protect the database. Various types of control systems within the DBMS make sure that the database continues to function properly.
They Include Integrity system Security system Concurrency control system Recovery control system Some DBMS enable us to define "views" of the database. A view is how the database appears to the user. This enables us to show only the relevant information to different types of users and it increases security, as certain users will not be able to see data which they are not meant to see.

2. What are the advantages of a DBMS?
Ans:
Advantages of DBMS:
Ans:
1. Redundancy is controlled: In File Processing System, duplicate data is created in many places because all the programs have their own files. This creates data

redundancy which in turns wastes labor and space. 'In Database Management System, all the files are integrated in a single database. The whole data is stored only once at a single place so there is no chance of duplicate data.

2. Sharing of Data: In a database, the users of the database can share the data among themselves. There are various levels of authorization to access the data. And consequently the data can only be shared based on the correct authorization protocols being followed. 4

3. Data Security: Data Security is vital concept in a database. Only authorized users should be allowed to access the database and their identity should be authenticated using a username and password. Unauthorized users should not be allowed to access the database under any circumstances as it violates the integrity constraints.

4. Enforces integrity constraints: Constraints are used to store accurate data because there are many users who feed data in database. Data stored in database should always be correct and accurate. DBMS provides the capability to enforce these constraints on database.

5. Provides backup and recovery of data: Data loss is a very big problem for all the organizations. In traditional tile processing system, a user needs to backup the database after a regular interval of time that wastes lots of time and resources._If the volume of data is large then this process may take a very long time.

3. What do you understand by Data Model?

Ans:

A Database model defines the logical design and structure of a database and defines how data will be stored, accessed and updated in a database management system. While the Relational Model is the most widely used database model.

Relational Model:

It is the most popular data model in DBMS. Relational model is the primary data model. Which is widely used for data processing. This model has all properties required to Process data with storage efficiency.

4. What is a primary key?

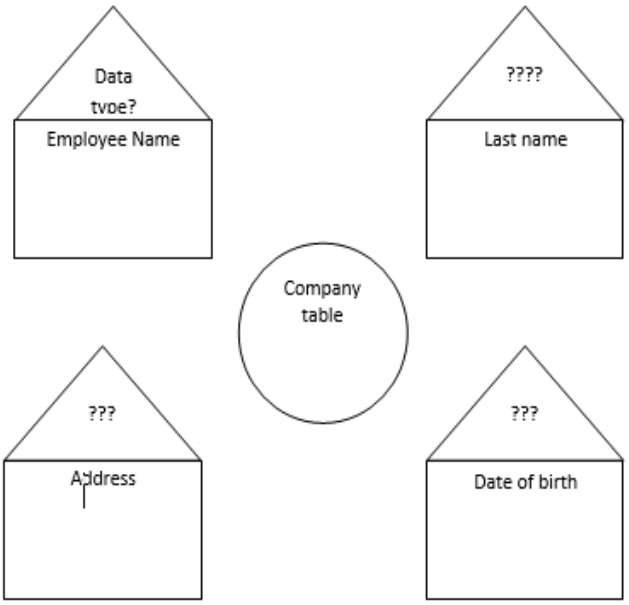
Ans: Primary Key: A column in the table that uniquely identifies each row m that table is called primary key.

5. What is DDL (Data Definition Language)

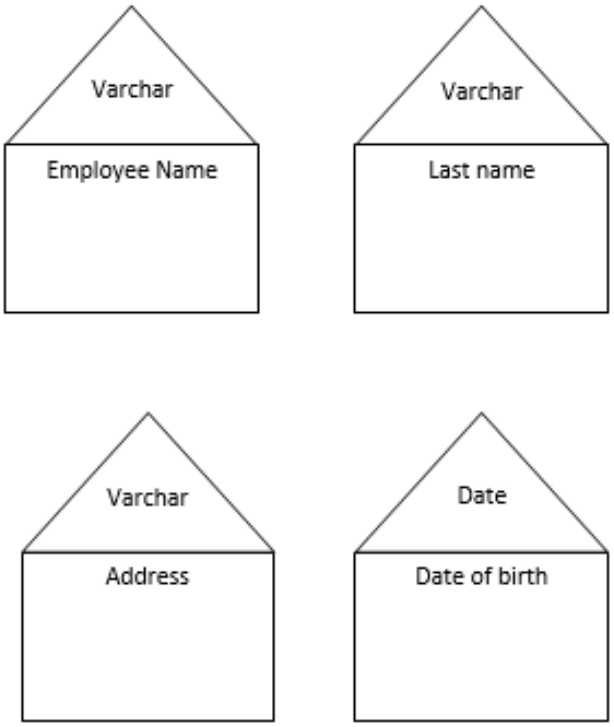
Ans: Data Definition Language (DDL): This language 15 used by the designer S anti programmers of the database to indicate the content and the structure of the database. It

is used to indicate the physical structure of the database i.e. filed name, their types etc, also ' the record relationships. E.g. CREATE ALTER, and DROP statement.

Q.7 In a company the data is stored in a table under the following fields Employee dumber, Last name, Date of birth, Address. Which data type will you use for the above field?



Ans:



Q.8 Complete the following: