Instruction:

Complete all questions in 1 hour.

Differentiate between Data and Information .

Data	Information
Data refers to raw facts and figures.	Information is the processed and organized form of data.
Data is unorganized and unprocessed.	Information is structured and meaningful.
Data can be numerical, textual, or visual.	Information is a combination of different types of data.
Data is a collection of facts and statistics.	Information is knowledge that can be used to make decisions.

Write short notes on:

DBMS

A database management system, or DBMS for short, is a software program used to manage and arrange data in a database. It offers customers a systematic and effective means to create, update, retrieve, and remove data. A number of tools and functions, including data security, data integrity, data recovery, and data access control, are offered by DBMSs. Additionally, they make it simple for numerous users and apps to share data. The widely used DBMSs are MySQL, SQL Server, and Oracle. DBMSs are widely utilized in a variety of sectors, including e-commerce, healthcare, and finance.

SQL

A relational database management system uses the programming language SQL (Structured Query Language) to manage and manipulate data (RDBMS). It is used to carry out actions like putting data into a database, changing it, getting it back, and removing it. Relational databases can be accessed using SQL, a standard language. Tables and other database objects can be created, modified, and queried using this tool. The following common SQL operations can be carried out: SELECT, INSERT, UPDATE, and DELETE. Several sectors, including finance, healthcare, and e-commerce, heavily rely on SQL. Additionally, business intelligence and data warehousing applications employ it.

File System

A file system is a way to store and arrange computer files and the data they hold such that it is simple to access and find them. The directory structure, or file system, is how a file system arranges files into a tree-like structure, with a root directory at the top. The file system controls how files are named, where they are physically located on the disk, and how data is saved on the disk. File systems like NTFS, FAT32, and ext4 are examples. Additionally, the file systems offer functions like backup, file permissions, encryption, and compression. Additionally, file systems store metadata about the files, such as creation and modification timestamps, the file's owner, and permissions, which the operating system uses to control access to the files.

Download and install XAMPP from any browser.
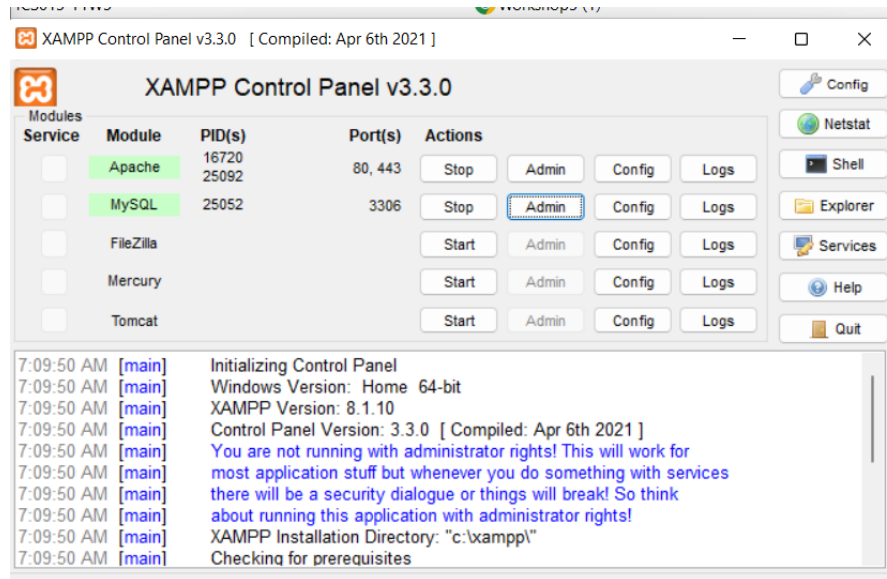
Create a database named HCK
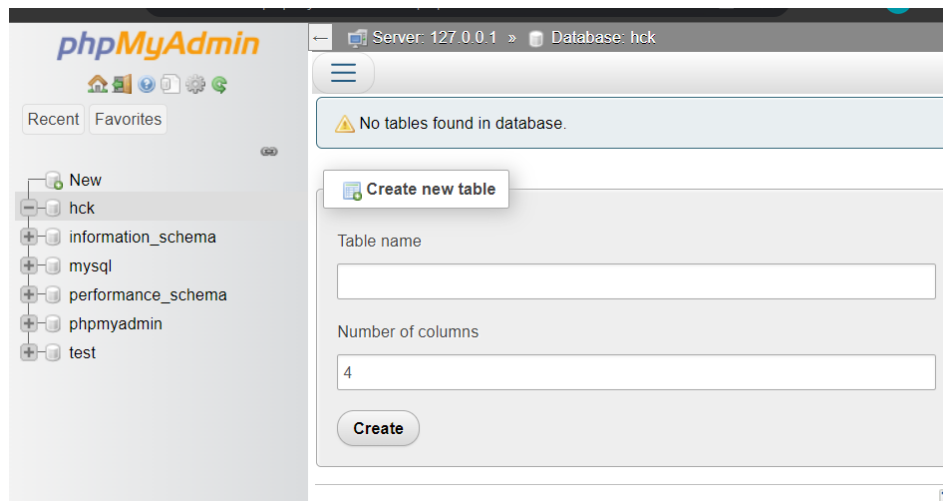
Create tables named Students, Parents and Tutors.
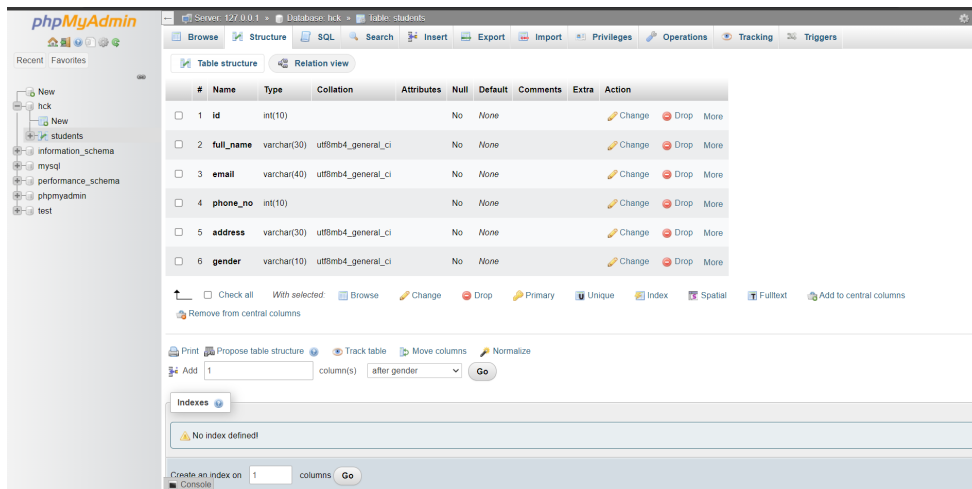
Create the attributes like (id, full_name, email, phone_no, address and gender) in all the above tables with suitable data types.
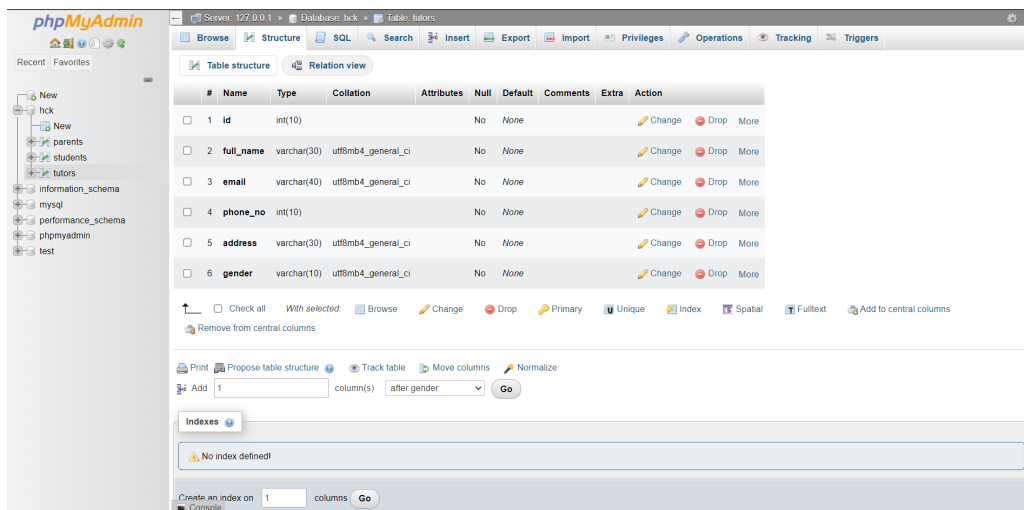
Insert the data using SQL Commands in all the table. (3 data)

Display the all data of the table Tutors.

Display only male students from table Students.

Drop column Parents using SQL command.

```
SELECT * FROM `parents`
```

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 ⌄   Filter rows: Search this table

Extra options

id	full_name	email	phone_no	address
1	Saru Gautam	saru@gmail.com	2147483647	Sundhara
4	Saina Shrestha	saina@gmail.com	9845667845	Balaju
5	Sambriddhi Dawadi	sambriddhi@gmail.com	9834566787	Kalanki

Delete a row in student using SQL command.

✔ Showing rows 0 - 1 (2 total, Query took 0.0006 seconds.)

```
SELECT * FROM `students`
```

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 ⌄   Filter rows: Search this table

Extra options

id	full_name	email	phone_no	address	gender
2	Sami Gautam	samigautam@gmail.com	9876543534	Gokarna	Female
1	Supriya Dev	supriya@gmail.com	9854678934	Bhotebahal	female