**CASE STUDY 1**

**DDL**

**Database**

1. Write a query to create a database named ecomm.

ANS- cd/

cd xampp/mysql/bin

create database ecomm;

1. Write a query to see a list of all databases in the Database Management System.

ANS- cd/

cd xampp/mysql/bin

show databases;

1. Write a query to drop database ecommerce.

ANS-cd/

C:\>cd xampp/mysql/bin

show databases;

drop database ecomm;

**Table creation and column manipulation**

1) Write a query to create a table named as userinfo which contains

user\_id,username,password,email,created\_on,. user\_id must be unique,not null, and auto

increment, created\_on must be a date field.

ANS- create table userinfo(user\_id int primary key auto\_increment,username varchar(20),password varchar(20),email varchar(50),create\_on date);

2) Write a query to see the table description or structure.

ANS- for description or structure-

Desc userinfo;

3) Write a query to add mobile\_no column after email column in above table.

ANS- alter table userinfo add column mobile\_no varchar(10) after email;

4) Write a query to rename table userinfo to user.

ANS- alter table userinfo rename user;

5) Write a query to change the datatype of created\_on from date to datetime.

ANS- alter table user modify column create\_on datetime;

6) Write a query to Rename column mobile\_no to mob\_no

Ans- alter table user change mobile\_no mob\_no varchar(10);

7) Write a SQL statement to rename the table countries to country\_new.

ANS- alter table countries rename country\_new;

8) Write a SQL statement to add a column region\_id to the table locations.

ANS- alter table location add column region\_id int;

9) Write a SQL statement to add a column ID as the first column of the table locations.

ANS- alter table location add column id int first;

10) Write a SQL statement to add a column region\_id after state\_province to the table locations.

ANS- alter table location add column state\_province varchar(20) after region\_id;

11) Write a SQL statement to change the data type of the column country\_id to integer in the

table locations.

ANS- alter table location modify column country\_id int;

12) Write a SQL statement to drop the column city from the table locations

ANS- alter table location drop city;

13) Write a SQL statement to change the name of the column state\_province to state, keeping

the data type and size same.

ANS- alter table location change state\_province state varchar(10);

14) Write a SQL statement to add a primary key for the column location\_id in the locations

table.

ANS- alter table location add primary key(location\_id);

15) Write a SQL statement to add a foreign key constraint named fk\_job\_id on the job\_id

column of the job\_history table referencing the primary key job\_id of jobs table

ANS- table 1-

create table jobs(job\_id int primary key,job\_name varchar(20));

table 2-

create table job\_history(id int primary key,job\_id int,foreign key(job\_id) references jobs(job\_id));

16) Write a SQL statement to drop the existing foreign key fk\_job\_id from the job\_history table

on the job\_id column which is referencing the job\_id of jobs table.

Note: fk\_job\_id is a constraint name.

ANS- 1st-

show create table job\_history;

2nd-

alter table job\_history drop constraint job\_history\_infk\_1;

17) Write a SQL statement to add an index named indx\_job\_id on job\_id column in the table

job\_history.

ANS- 1st-

show create table job\_history;

2nd-

alter table job\_history drop index job\_id;

**Constraints**

1) Write a query to create product table which contains columns product\_id,product\_name,

price,category,description,image\_url,is\_deleted. product\_id is unique,not null and auto

increment.

ANS- create table product(product\_id int primary key auto\_increment,product\_name varchar(20),price int,category varchar(20), description varchar(200),image\_url varchar(100),is\_deleted varchar(20));

2) Write a query to create a cart table which contains columns as cart\_id,user\_id,product\_id.

cart\_id is unique,not null and auto increment,apply foreign key constraint for user\_id which

takes reference of user\_id column from user table,also apply foreign key constraints for

product\_id which takes reference of product\_id from product table.

Use cascade delete and update options so that if a record is deleted or updated in the

parent table user and product it will be reflected in the cart [child] table.

ANS- 1st query-

create table user(user\_id int primary key auto\_increment,user\_name varchar(20),mobile\_no varchar(10));

2nd query-

create table cart(cart\_id int primary key auto\_increment,user\_id int,product\_id int,foreign key(user\_id) references user(user\_id) on delete cascade on update cascade,foreign key(product\_id) references product(product\_id) on delete cascade on update cascade);