

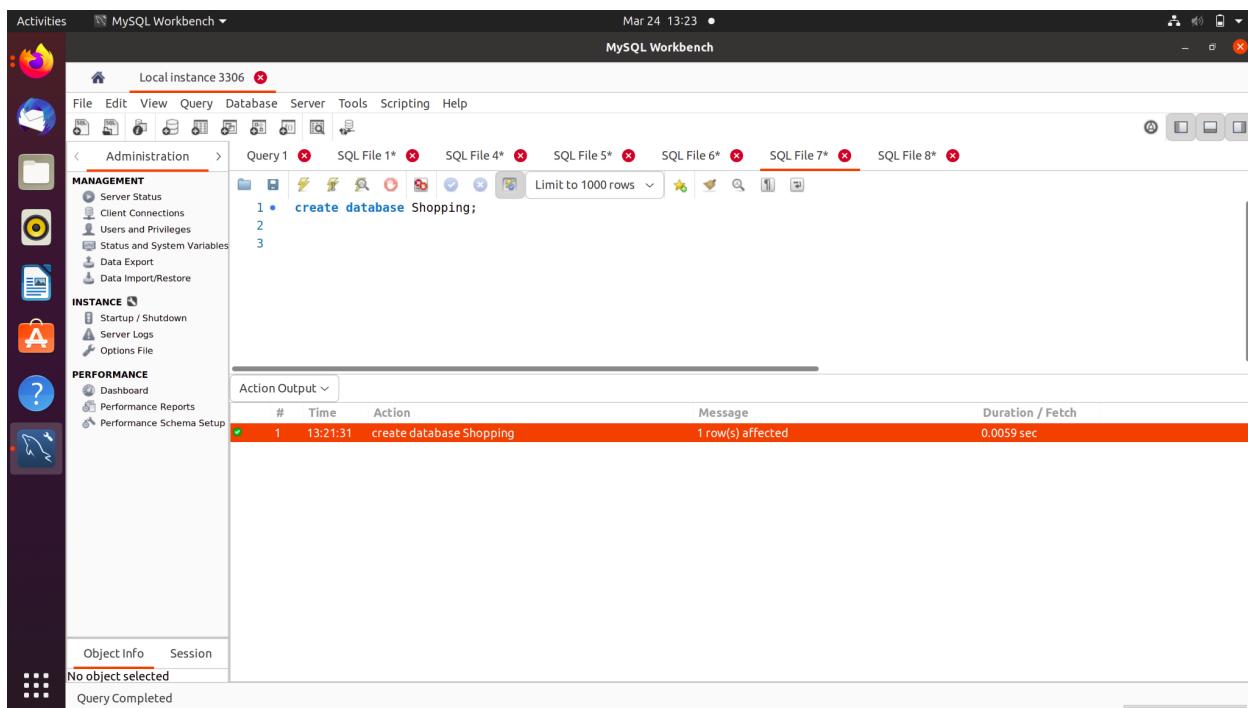
# **MYSQL Assignment - I**

## **By-Sahil Babbar**

### **Step 1: Create database**

**Syntax:** -Create database “databasename”;

**Query->** create database Shopping;



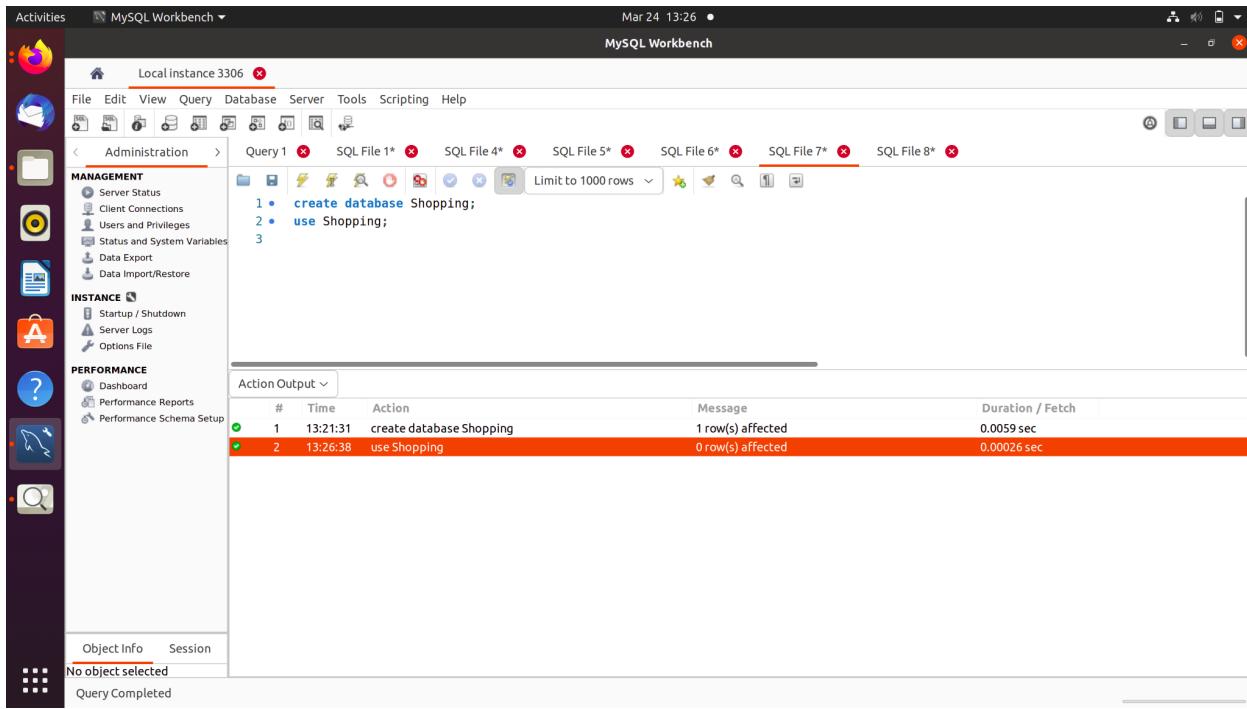
### **Step 2: Use database Mysql**

#### **Syntax:**

Use “databasename”

The SQL **USE** statement is used to select any existing database in the SQL schema.

**Query->** Use Shopping;



### Step 3: Create Product Table

#### Syntax:

```
CREATE TABLE table_name (
    column1 datatype,
    column2 datatype,
    column3 datatype,
)
```

The **CREATE TABLE** statement is used to create a new table in a database.

**Query->** `create table Product(pid int primary key, price double, name varchar(40));`

`// The PRIMARY KEY constraint uniquely identifies each record in a table and cannot contain NULL values.`

The screenshot shows the MySQL Workbench interface with the following details:

- Toolbar:** File, Edit, View, Query, Database, Server, Tools, Scripting, Help.
- Left Sidebar:** Activities, Local instance 3306, Administration, MANAGEMENT (Server Status, Client Connections, Users and Privileges, Status and System Variables, Data Export, Data Import/Restore), INSTANCE (Startup / Shutdown, Server Logs, Options File), PERFORMANCE (Dashboard, Performance Reports, Performance Schema Setup).
- Query Editor:** Shows three queries:
  - create database Shopping;
  - use Shopping;
  - create table Product(pid int primary key, price double, name varchar(40));
- Action Output:** Displays the results of the queries:

#	Time	Action	Message	Duration / Fetch
1	13:21:31	create database Shopping	1 row(s) affected	0.0059 sec
2	13:26:38	use Shopping	0 row(s) affected	0.00026 sec
3	13:28:12	create table Product(pid int primary key, price double, n...	0 row(s) affected	0.016 sec
- Status Bar:** Mar 24 13:28 • MySQL Workbench

## Product Table Schema

Query -> desc Product;

The screenshot shows the MySQL Workbench interface with the following details:

- Toolbar:** File, Edit, View, Query, Database, Server, Tools, Scripting, Help.
- Left Sidebar:** Activities, Local instance 3306, Administration, MANAGEMENT, INSTANCE, PERFORMANCE.
- Query Editor:** Shows four queries:
  - create database Shopping;
  - use Shopping;
  - create table Product(pid int primary key, price double, name varchar(40));
  - desc Product;
- Result Grid:** Displays the schema of the Product table:

#	Field	Type	Null	Key	Default	Extra
1	pid	int	NO	PRI		
2	price	double	YES			
- Action Output:** Displays the results of the queries:

#	Time	Action	Message	Duration / Fetch
1	13:21:31	create database Shopping	1 row(s) affected	0.0059 sec
2	13:26:38	use Shopping	0 row(s) affected	0.00026 sec
3	13:28:12	create table Product(pid int primary key, price double, n...	0 row(s) affected	0.016 sec
4	13:30:21	desc Product	3 row(s) returned	0.0035 sec / 0.0000...
- Status Bar:** Mar 24 13:30 • MySQL Workbench

## Step 4: Insert values into product table

### Syntax:

```
INSERT INTO table_name
VALUES (value1, value2, value3, ...);
```

The INSERT INTO statement is used to insert new records in a table.

// concat method is used to concatenate firstname with “name”

### Query->

```
insert into Product values(101,1000,concat('smart watch','Sahil'));
insert into Product values(102,7000,concat('android phone','Sahil'));
insert into Product values(103,60000,concat('Smart TV','Sahil'));
insert into Product values(104,30000,concat('Laptop','Sahil'));
```

The screenshot shows the MySQL Workbench interface. The left sidebar has a tree view with 'Administration' selected, under which 'MANAGEMENT' and 'INSTANCE' sections are visible. The main area has tabs for 'Query 1' through 'Query 8'. The 'SQL File 7\*' tab is active, showing the following SQL code:

```
4 • desc Product;
5 • insert into Product values(101,1000,concat('smart watch','Sahil'));
6 • insert into Product values(102,7000,concat('android phone','Sahil'));
7 • insert into Product values(103,60000,concat('Smart TV','Sahil'));
8 • insert into Product values(104,30000,concat('Laptop','Sahil'));
9 • select * from Product;
```

Below the code, the 'Result Grid' shows the inserted data:

#	pid	price	name
1	101	1000	smart watchSahil
2	102	7000	android phoneSahil
3	103	60000	Smart TVsahil
4	104	30000	Laptopsahil

Below the grid, the 'Action Output' section displays the log of operations:

#	Time	Action	Message	Duration / Fetch
3	13:28:12	create table Product(pid int primary key, price double, n...	0 row(s) affected	0.016 sec
4	13:30:21	desc Product	3 row(s) returned	0.0035 sec / 0.0000...
5	13:38:09	insert into Product values(101,1000,concat('smart watch...)	1 row(s) affected	0.0059 sec
6	13:38:09	insert into Product values(102,7000,concat('android pho...)	1 row(s) affected	0.0071 sec
7	13:38:09	insert into Product values(103,60000,concat('Smart TV','...)	1 row(s) affected	0.0030 sec
8	13:38:09	insert into Product values(104,30000,concat('Laptop','S...)	1 row(s) affected	0.0035 sec
9	13:38:45	select * From Product LIMIT 0, 1000	4 row(s) returned	0.00020 sec / 0.000...

## Step 5: Show Product details

## Syntax:

Select \* from “tablename”

The SELECT statement is used to select data from a database.

**Query -> Select \* from Product;**

The screenshot shows the MySQL Workbench interface. On the left, the navigation pane is open with sections like MANAGEMENT, INSTANCE, and PERFORMANCE. The central area has tabs for Query 1 through SQL File 8\*. The SQL tab contains the following code:

```
4 • desc Product;
5 • insert into Product values(101,1000,concat('smart watch','Sahil'));
6 • insert into Product values(102,7000,concat('android phone','Sahil'));
7 • insert into Product values(103,60000,concat('Smart TV','Sahil'));
8 • insert into Product values(104,30000,concat('Laptop','Sahil'));
9 • select * from Product;
```

The Result Grid shows the data inserted into the Product table:

#	pid	price	name
1	101	1000	smart watchSahil
2	102	7000	android phoneSahil
3	103	60000	Smart TVsahil
4	104	30000	LaptopSahil

Below the grid, the Action Output table shows the execution details:

#	Time	Action	Message	Duration / Fetch
3	13:28:12	create table Product(pid int primary key, price double, n...	0 row(s) affected	0.016 sec
4	13:30:21	desc Product	3 row(s) returned	0.0035 sec / 0.0000...
5	13:38:09	Insert into Product values(101,1000,concat('smart watch...)	1 row(s) affected	0.0059 sec
6	13:38:09	Insert into Product values(102,7000,concat('android pho...)	1 row(s) affected	0.0071 sec
7	13:38:09	Insert into Product values(103,60000,concat('Smart TV','...)	1 row(s) affected	0.0030 sec
8	13:38:09	Insert into Product values(104,30000,concat('Laptop','S...)	1 row(s) affected	0.0035 sec
9	13:38:45	select * from Product LIMIT 0, 1000	4 row(s) returned	0.00020 sec / 0.000...

**Step 6:** Create second Table Cart that takes pid as foreign key and Quantity (qty) for each product.

**Query -> create table Cart(pid int,foreign key(pid) references Product(pid),qty int);**

**// Foreign Key -> A FOREIGN KEY is a field (or collection of fields) in one table, that refers to the PRIMARY KEY in another table.**

```

Local instance 3306 • Mar 24 13:47 • MySQL Workbench

File Edit View Query Database Server Tools Scripting Help
Administration > Query 1 SQL File 1* SQL File 4* SQL File 5* SQL File 6* SQL File 7* SQL File 8*
MANAGEMENT
    Server Status
    Client Connections
    Users and Privileges
    Status and System Variables
    Data Export
    Data Import/Restore
INSTANCE
    Startup / Shutdown
    Server Logs
    Options File
PERFORMANCE
    Dashboard
    Performance Reports
    Performance Schema Setup

1. create database Shopping;
2. use Shopping;
3. create table Product(pid int primary key, price double, name varchar(40));
4. desc Product;
5. insert into Product values(101,1000,concat('smart watch','Sahil'));
6. insert into Product values(102,7000,concat('android phone','Sahil'));
7. insert into Product values(103,60000,concat('Smart TV','Sahil'));
8. insert into Product values(104,30000,concat('Laptop','Sahil'));
9. select * from Product;
10.
11. create table Cart(pid int,foreign key(pid) references Product(pid),qty int);
12.

Action Output
# Time Action Message Duration / Fetch
1 13:26:38 use Shopping 0 row(s) affected 0.00026 sec
2 13:28:12 create table Product(pid int primary key, price double, n... 0 row(s) affected 0.016 sec
3 13:30:21 desc Product 3 row(s) returned 0.0035 sec / 0.000...
4 13:38:09 Insert into Product values(101,1000,concat('smart watch... 1 row(s) affected 0.0059 sec
5 13:38:09 Insert into Product values(102,7000,concat('android pho... 1 row(s) affected 0.0071 sec
6 13:38:09 Insert into Product values(103,60000,concat('Smart TV','... 1 row(s) affected 0.0030 sec
7 13:38:09 Insert into Product values(104,30000,concat('Laptop','S... 1 row(s) affected 0.0035 sec
8 13:38:45 select * from Product LIMIT 0, 1000 4 row(s) returned 0.00020 sec / 0.000...
9 13:47:05 create table Cart(pid int,foreign key(pid) references Pro... 0 row(s) affected 0.030 sec
10 13:47:05 desc Cart 2 row(s) returned 0.0052 sec / 0.000...

Object Info Session
No object selected
Query Completed

```

## Cart Schema

Query-> desc Cart;

```

Local instance 3306 • Mar 24 13:48 • MySQL Workbench

File Edit View Query Database Server Tools Scripting Help
Administration > Query 1 SQL File 1* SQL File 4* SQL File 5* SQL File 6* SQL File 7* SQL File 8*
MANAGEMENT
    Server Status
    Client Connections
    Users and Privileges
    Status and System Variables
    Data Export
    Data Import/Restore
INSTANCE
    Startup / Shutdown
    Server Logs
    Options File
PERFORMANCE
    Dashboard
    Performance Reports
    Performance Schema Setup

6. insert into Product values(102,7000,concat('android phone','Sahil'));
7. insert into Product values(103,60000,concat('Smart TV','Sahil'));
8. insert into Product values(104,30000,concat('Laptop','Sahil'));
9. select * from Product;
10.
11. create table Cart(pid int,foreign key(pid) references Product(pid),qty int);
12. desc Cart;

Result Grid Filter Rows: Export: Wrap Cell Content: Result Grid Read Only
# Field Type Null Key Default Extra
1 pid int YES MUL
2 qty int YES

Result 3
Action Output
# Time Action Message Duration / Fetch
3 13:28:12 create table Product(pid int primary key, price double, n... 0 row(s) affected 0.016 sec
4 13:30:21 desc Product 3 row(s) returned 0.0035 sec / 0.000...
5 13:38:09 Insert into Product values(101,1000,concat('smart watch... 1 row(s) affected 0.0059 sec
6 13:38:09 Insert into Product values(102,7000,concat('android pho... 1 row(s) affected 0.0071 sec
7 13:38:09 Insert into Product values(103,60000,concat('Smart TV','... 1 row(s) affected 0.0030 sec
8 13:38:09 Insert into Product values(104,30000,concat('Laptop','S... 1 row(s) affected 0.0035 sec
9 13:38:45 select * from Product LIMIT 0, 1000 4 row(s) returned 0.00020 sec / 0.000...
10 13:47:05 create table Cart(pid int,foreign key(pid) references Pro... 0 row(s) affected 0.030 sec
11 13:48:17 desc Cart 2 row(s) returned 0.0052 sec / 0.000...

Object Info Session
No object selected
Query Completed

```

## Step 7: Insert values into Cart table

Query ->

```
insert into Cart values(101,3);
insert into Cart values(102,2);
insert into Cart values(103,1);
insert into Cart values(104,4);
```

The screenshot shows the MySQL Workbench interface. The left sidebar contains navigation links for Activities, Local instance 3306, Administration, INSTANCE, PERFORMANCE, and Object Info (which shows 'No object selected'). The main area has tabs for Query 1 through SQL File 8\*. The SQL tab displays the following code:

```
5 • insert into Product values(101,1000,concat('smart watch','Sahil'));
6 • insert into Product values(102,7000,concat('android phone','Sahil'));
7 • insert into Product values(103,60000,concat('Smart TV','Sahil'));
8 • insert into Product values(104,30000,concat('Laptop','Sahil'));
9 • select * from Product;
10
11 • create table Cart(pid int,foreign key(pid) references Product(pid),qty int);
12 • desc Cart;
13
14 • insert into Cart values(101,3);
15 • insert into Cart values(102,2);
16 • insert into Cart values(103,1);
17 • insert into Cart values(104,4);
```

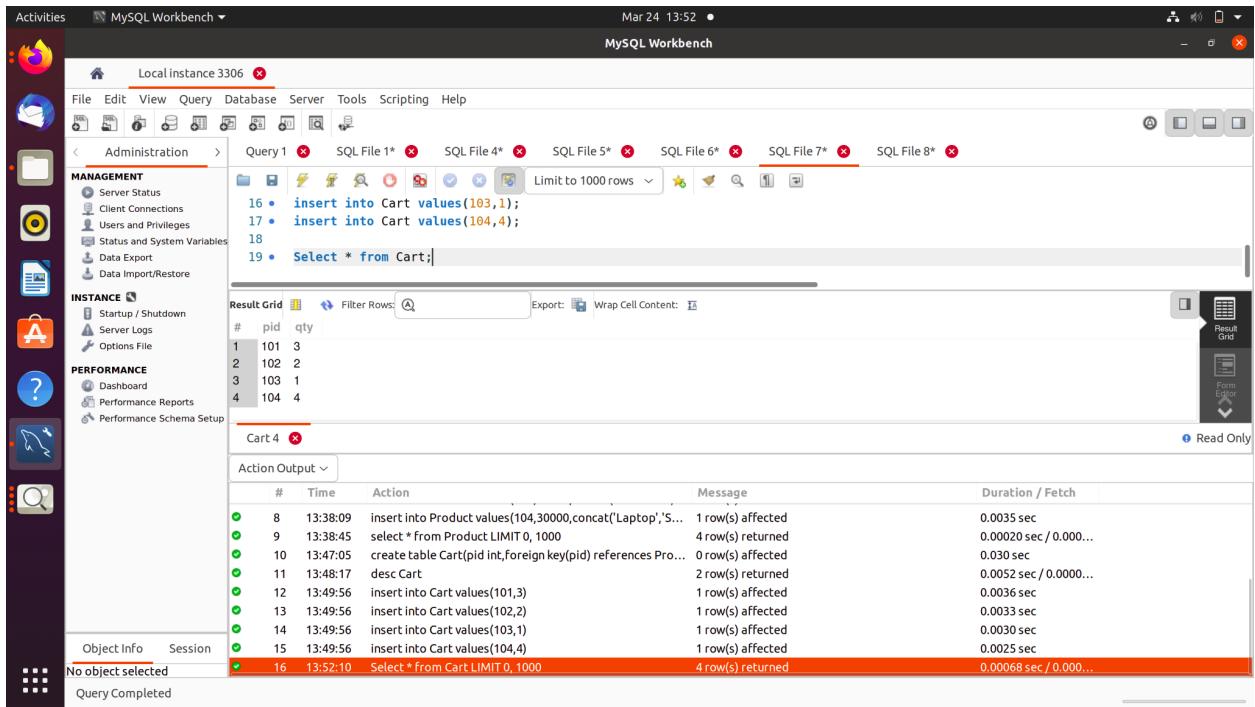
Below the code, the Action Output pane shows the execution log:

Action	#	Time	Message	Duration / Fetch
insert into Product values(103,60000,concat('Smart TV','...'))	7	13:38:09	1 row(s) affected	0.0030 sec
insert into Product values(104,30000,concat('Laptop','S...'))	8	13:38:09	1 row(s) affected	0.0035 sec
select * from Product LIMIT 0, 1000	9	13:38:45	4 row(s) returned	0.00020 sec / 0.000...
create table Cart(pid int,foreign key(pid) references Product(pid),qty int)	10	13:47:05	0 row(s) affected	0.030 sec
desc Cart	11	13:48:17	2 row(s) returned	0.0052 sec / 0.0000...
insert into Cart values(101,3)	12	13:49:56	1 row(s) affected	0.0036 sec
insert into Cart values(102,2)	13	13:49:56	1 row(s) affected	0.0033 sec
insert into Cart values(103,1)	14	13:49:56	1 row(s) affected	0.0030 sec
insert into Cart values(104,4)	15	13:49:56	1 row(s) affected	0.0025 sec

## Step 8: show Cart Details

Query->

```
Select * from Cart;
```



**Step 8:** Calculate the totalprice to be paid at the time of checkout.

**Query->**

```
select concat( 'Total Price of items:' , sum(price * qty)) as totalprice from Product p,Cart c where p.pid=c.pid;
```

//The SUM() is an aggregate function returns the total sum of a numeric column.

Activities MySQL Workbench Mar 24 14:33

MySQL Workbench Local instance 3306

File Edit View Query Database Server Tools Scripting Help

Administration > Query 1 SQL File 1\* SQL File 4\* SQL File 5\* SQL File 6\* SQL Assignment\* SQL File 8\*

MANAGEMENT

- Server Status
- Client Connections
- Users and Privileges
- Status and System Variables
- Data Export
- Data Import/Restore

INSTANCE

- Startup / Shutdown
- Server Logs
- Options File

PERFORMANCE

- Dashboard
- Performance Reports
- Performance Schema Setup

Object Info Session No object selected Read Only

Query Completed

Limit to 1000 rows

8 • select \* from Product;  
9 • desc product;  
10 • create table Cart(pid int,foreign key(pid) references Product(pid),qty int);  
11 • insert into Cart values(101,3);  
12 • insert into Cart values(102,2);  
13 • insert into Cart values(103,1);  
14 • insert into Cart values(104,4);  
15  
16 • select \* from Cart;  
17 • select concat('Total Price of items:', sum(price \* qty)) as totalprice from Product p,Cart c where p.pid=c.pid;

Result Grid Filter Rows Export Wrap Cell Content

#	totalprice
1	Total Price of items:197000

Result 2

Result Grid Form Editor Field Types Query Stats