

ONLINE SHOES MANAGEMENT

SYSTEM

Objective :

Create a MySQL database for a shoe shop to manage information about different shoes, including their categories, names, prices, and other relevant details.

MySQL Commands :

- **Create Database**

```
mysql> create database Shoe_shop;  
Query OK, 1 row affected (0.14 sec)
```

- **Show Databases**

```
mysql> show databases;  
+-----+  
| Database |  
+-----+  
| information_schema |  
| mysql |  
| performance_schema |  
| shoe_shop |  
| shoe_store |  
| sys |  
+-----+  
6 rows in set (0.07 sec)
```

- Use Databases

```
mysql> use shoe_shop;  
Database changed
```

- Create Table

```
mysql> create table Admin(  
    -> Id INT AUTO_INCREMENT PRIMARY KEY,  
    -> Email VARCHAR(50),  
    -> Password VARCHAR(140));  
Query OK, 0 rows affected (0.19 sec)
```

```
mysql> create table shoes(  
    -> shoe_id int,  
    -> brand varchar(50),  
    -> size varchar(10),  
    -> color varchar(20),  
    -> price decimal(10,2),  
    -> quantity int);  
Query OK, 0 rows affected (0.20 sec)
```

```
mysql> create table customers(  
    -> customer_id int,  
    -> customer_name varchar(100),  
    -> email varchar(100),  
    -> phone_number bigint);  
Query OK, 0 rows affected (0.05 sec)
```

```
mysql> CREATE TABLE inventory (  
->     inventory_id INT AUTO_INCREMENT PRIMARY KEY,  
->     shoe_id INT,  
->     quantity INT,  
->     FOREIGN KEY (shoe_id) REFERENCES shoes(shoe_id)  
-> );  
Query OK, 0 rows affected (0.13 sec)
```

```
mysql> CREATE TABLE sales (  
->     sale_id INT AUTO_INCREMENT PRIMARY KEY,  
->     purchase_id INT,  
->     sale_date DATE,  
->     sale_amount DECIMAL(10,2),  
->     FOREIGN KEY (purchase_id) REFERENCES purchases(purchase_id)  
-> );  
Query OK, 0 rows affected (0.12 sec)
```

- **Show Table**

```
mysql> show tables;  
+-----+  
| Tables_in_shoe_shop |  
+-----+  
| admin                |  
| customers            |  
| inventory            |  
| purchases            |  
| sales               |  
| shoes               |  
+-----+  
6 rows in set (0.01 sec)
```

- **Alter Table**

```
mysql> alter table admin  
      -> MODIFY Column Password VARCHAR(150);  
Query OK, 0 rows affected (0.08 sec)  
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> alter table shoes  
      -> add Customer_name varchar(50);  
Query OK, 0 rows affected (0.09 sec)  
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> alter table inventory  
      -> add column delivery date;  
Query OK, 0 rows affected (0.05 sec)  
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> ALTER TABLE inventory  
      -> MODIFY COLUMN quantity DECIMAL(12,2);  
Query OK, 0 rows affected (0.16 sec)  
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> ALTER TABLE inventory  
      -> ADD COLUMN shoe_id INT,  
      -> ADD CONSTRAINT fk_shoe_id  
      -> FOREIGN KEY (shoe_id) REFERENCES shoes(shoe_id);  
ERROR 1060 (42S21): Duplicate column name 'shoe_id'  
mysql> alter table inventory  
      -> add constraint fk_shoe_id  
      -> foreign key (shoe_id) references shoes(shoe_id);  
Query OK, 0 rows affected (0.15 sec)  
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> alter table customers
-> add primary key(customer_id);
Query OK, 0 rows affected (0.09 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> alter table customers
-> add constraints unique_email unique(email);
ERROR 1064 (42000): You have an error in your SQL syntax; check th
for the right syntax to use near 'unique_email unique(email)' at
mysql> alter table customers
-> add constraint unique_email unique(email);
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> alter table customers
-> add constraint unique_phone_number unique(phone_number);
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> alter table shoes
-> add constraint unique_customer_name unique(customer_name);
Query OK, 0 rows affected (0.09 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

CONSTRAINTS :

- **Primary Key**

```
mysql> desc admin;
```

Field	Type	Null	Key	Default	Extra
Id	int	NO	PRI	NULL	auto_increment
Email	varchar(50)	YES		NULL	
Password	varchar(140)	YES		NULL	

3 rows in set (0.03 sec)

```
mysql> desc customers;
```

Field	Type	Null	Key	Default	Extra
customer_id	int	NO	PRI	NULL	
customer_name	varchar(100)	YES		NULL	
email	varchar(100)	YES	UNI	NULL	
phone_number	bigint	YES	UNI	NULL	

```
4 rows in set (0.00 sec)
```

```
mysql> desc purchases;
```

Field	Type	Null	Key	Default	Extra
purchase_id	int	NO	PRI	NULL	
customer_id	int	YES		NULL	
shoe_id	int	YES		NULL	
quantity	int	YES		NULL	
purchase_date	date	YES		NULL	

```
5 rows in set (0.00 sec)
```

```
mysql> desc shoes;
```

Field	Type	Null	Key	Default	Extra
shoe_id	int	NO	PRI	NULL	
Customer_name	varchar(50)	YES	UNI	NULL	
brand	varchar(50)	YES		NULL	
size	varchar(10)	YES		NULL	
color	varchar(20)	YES		NULL	
price	decimal(10,2)	YES		NULL	
quantity	int	YES		NULL	

```
7 rows in set (0.00 sec)
```

- **Foreign Key**

```
mysql> desc sales;
```

Field	Type	Null	Key	Default	Extra
sale_id	int	NO	PRI	NULL	auto_increment
purchase_id	int	YES	MUL	NULL	
sale_date	date	YES		NULL	
sale_amount	decimal(10,2)	YES		NULL	

```
4 rows in set (0.00 sec)
```

```
mysql> desc inventory;
```

Field	Type	Null	Key	Default	Extra
inventory_id	int	NO	PRI	NULL	auto_increment
shoe_id	int	YES	MUL	NULL	
quantity	decimal(12,2)	YES		NULL	
delivery	date	YES		NULL	

```
4 rows in set (0.00 sec)
```

- **Unique Key**

```
mysql> desc shoes;
```

Field	Type	Null	Key	Default	Extra
shoe_id	int	NO	PRI	NULL	
Customer_name	varchar(50)	YES	UNI	NULL	
brand	varchar(50)	YES		NULL	
size	varchar(10)	YES		NULL	
color	varchar(20)	YES		NULL	
price	decimal(10,2)	YES		NULL	
quantity	int	YES		NULL	

```
7 rows in set (0.00 sec)
```

```
mysql> desc customers;
```

Field	Type	Null	Key	Default	Extra
customer_id	int	NO	PRI	NULL	
customer_name	varchar(100)	YES		NULL	
email	varchar(100)	YES	UNI	NULL	
phone_number	bigint	YES	UNI	NULL	

```
4 rows in set (0.00 sec)
```

• Check

```
mysql> ALTER TABLE customers
```

```
-> ADD CONSTRAINT chk_positive_phone_number CHECK (phone_number > 0);
```

```
Query OK, 7 rows affected (0.13 sec)
```

```
Records: 7 Duplicates: 0 Warnings: 0
```

```
mysql> ALTER TABLE customers
```

```
-> ADD CONSTRAINT chk_positive_customer_id CHECK (customer_id > 0);
```

```
Query OK, 7 rows affected (0.11 sec)
```

```
Records: 7 Duplicates: 0 Warnings: 0
```

```
mysql> ALTER TABLE shoes
```

```
-> ADD CONSTRAINT chk_positive_shoe_id CHECK (shoe_id > 0);
```

```
Query OK, 7 rows affected (0.12 sec)
```

```
Records: 7 Duplicates: 0 Warnings: 0
```

```
mysql> ALTER TABLE shoes
```

```
-> ADD CONSTRAINT chk_positive_size CHECK (size > 0);
```

```
Query OK, 7 rows affected (0.12 sec)
```

```
Records: 7 Duplicates: 0 Warnings: 0
```

```
mysql> ALTER TABLE shoes
```

```
-> ADD CONSTRAINT chk_positive_quantity CHECK (quantity > 0);
```

```
Query OK, 7 rows affected (0.11 sec)
```

```
Records: 7 Duplicates: 0 Warnings: 0
```

```
mysql> ALTER TABLE shoes
```

```
-> ADD CONSTRAINT chk_positive_price CHECK (price > 0);
```

```
Query OK, 7 rows affected (0.69 sec)
```

```
Records: 7 Duplicates: 0 Warnings: 0
```


- **Not Null**

```
mysql> ALTER TABLE shoes
    -> MODIFY COLUMN shoe_id int NOT NULL;
Query OK, 0 rows affected (0.06 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> ALTER TABLE shoes
    -> MODIFY COLUMN customer_id varchar(50) NOT NULL;
ERROR 1054 (42S22): Unknown column 'customer_id' in 'shoes'
mysql> ALTER TABLE shoes
    -> MODIFY COLUMN customer_name varchar(50) NOT NULL;
Query OK, 0 rows affected (0.13 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> ALTER TABLE shoes
    -> MODIFY COLUMN brand varchar(50) NOT NULL;
Query OK, 0 rows affected (0.14 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> ALTER TABLE shoes
    -> MODIFY COLUMN size varchar(10) NOT NULL;
Query OK, 0 rows affected (0.13 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> ALTER TABLE shoes
    -> MODIFY COLUMN color varchar(20) NOT NULL;
Query OK, 0 rows affected (0.12 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> ALTER TABLE shoes
    -> MODIFY COLUMN price decimal(10, 2) NOT NULL;
Query OK, 0 rows affected (0.12 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> ALTER TABLE shoes
    -> MODIFY COLUMN quantity int NOT NULL;
Query OK, 0 rows affected (0.14 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> ALTER TABLE customers
    -> MODIFY COLUMN customer_id int NOT NULL;
Query OK, 0 rows affected (0.03 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> ALTER TABLE customers
    -> MODIFY COLUMN customer_name varchar(100) NOT NULL;
Query OK, 0 rows affected (0.12 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> ALTER TABLE customers
    -> MODIFY COLUMN email varchar(100) NOT NULL;
Query OK, 0 rows affected (0.14 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> ALTER TABLE customers
    -> MODIFY COLUMN phone_number Bigint NOT NULL;
Query OK, 0 rows affected (0.17 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

- **Insert into table_name (column1, column2,) values(value1, value2,)**

```
mysql> insert into shoes(shoe_id, Customer_name, brand, size, color, price, quantity)
    -> values
    -> (5796, 'Dyanavardhan', 'Puma', 8, 'blue', 3000, 5),
    -> (5009, 'Noel', 'Nike', 10, 'Red', 15000, 1),
    -> (5879, 'Tom', 'Woodland', 10, 'Purple', 6000, 2),
    -> (5098, 'Kevin Hart', 'Adidas', 8, 'Red', 7000, 3),
    -> (5089, 'Micheal Jordan', 'Air Jordans', 12, 'Black', 20000, 5),
    -> (5108, 'Lebron James', 'Nike', 15, 'Blue', 10000, 8);
Query OK, 6 rows affected (0.03 sec)
Records: 6 Duplicates: 0 Warnings: 0
```

```
mysql> insert into customers(customer_id, customer_name, email, phone_number)
-> values
-> (0001, 'John Doe', 'johndoe01@gmail.com', 9345748765),
-> (0002, 'Jane Smith', 'janesmith02@gmail.com', 1290783265),
-> (0003, 'Bob Johnson', 'bobjohnson03@gmail.com1', 2378465363),
-> (0004, 'Alice Williams', 'alicewilliams04@gmail.com', 7834523452),
-> (0005, 'Charlie Brown', 'charliebrown05@gmail.com', 3278956431),
-> (0006, 'Joel Miller', 'joelmiller06@gmail.com', 5234789611),
-> (0007, 'George Bush', 'georgebush07@gmail.com', 6723123487);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that co
for the right syntax to use near '@gmail.com', 5234789611),
(0007, 'George Bush', 'georgebush07@gmail.com', 67231' at line 8
mysql> insert into customers(customer_id, customer_name, email, phone_number)
-> values
-> (0001, 'John Doe', 'johndoe01@gmail.com', 9345748765),
-> (0002, 'Jane Smith', 'janesmith02@gmail.com', 1290783265),
-> (0003, 'Bob Johnson', 'bobjohnson03@gmail.com1', 2378465363),
-> (0004, 'Alice Williams', 'alicewilliams04@gmail.com', 7834523452),
-> (0005, 'Charlie Brown', 'charliebrown05@gmail.com', 3278956431),
-> (0006, 'Joel Miller', 'joelmiller06@gmail.com', 5234789611),
-> (0007, 'George Bush', 'georgebush07@gmail.com', 6275123489);
Query OK, 7 rows affected (0.01 sec)
Records: 7 Duplicates: 0 Warnings: 0
```

```
mysql> insert into purchases(purchase_id, customer_id, shoe_id, quantity, purchase_date)
-> values
-> (1001, 0001, 701, 2, '2024-03-05');
Query OK, 1 row affected (0.02 sec)

mysql> insert into purchases(purchase_id, customer_id, shoe_id, quantity, purchase_date)
-> values
-> (1002, 0002, 702, 3, '2024-01-01'),
-> (1002, 0003, 703, 1, '2024-02-05'),
-> (1003, 0004, 706, 4, '2024-01-06');
ERROR 1062 (23000): Duplicate entry '1002' for key 'purchases.PRIMARY'
mysql> insert into purchases(purchase_id, customer_id, shoe_id, quantity, purchase_date)
-> values
-> (1002, 0002, 702, 3, '2024-01-01'),
-> (1003, 0003, 703, 1, '2024-02-05'),
-> (1004, 0004, 704, 2, '2024-01-23'),
-> (1005, 0005, 705, 1, '2024-03-01');
Query OK, 4 rows affected (0.01 sec)
Records: 4 Duplicates: 0 Warnings: 0
```

```
mysql> insert into sales(sale_id, purchase_id, sale_date, sale_amount)
-> values
-> (3201, 1001, '2024-03-05', 2000),
-> (3202, 1002, '2024-01-01', 3000),
-> (3203, 1003, '2024-02-04', 4000),
-> (3204, 1004, '2024-03,01', 6000);
Query OK, 4 rows affected, 1 warning (0.01 sec)
Records: 4  Duplicates: 0  Warnings: 1
```

• **Select * from table_name**

```
mysql> Select * from Shoes;
```

shoe_id	Customer_name	brand	size	color	price	quantity
5009	Noel	Nike	10	Red	15000.00	1
5089	Micheal Jordan	Air Jordans	12	Black	20000.00	5
5098	Kevin Hart	Adidas	8	Red	7000.00	3
5108	Lebron James	Nike	15	Blue	10000.00	8
5796	Dyanavardhan	Puma	8	blue	3000.00	5
5804	Arpan	Air Jordans	8	black	8000.00	2
5879	Tom	Woodland	10	Purple	6000.00	2

7 rows in set (0.01 sec)

```
mysql> select * from customers;
```

customer_id	customer_name	email	phone_number
1	John Doe	johndoe01@gmail.com	9345748765
2	Jane Smith	janesmith02@gmail.com	1290783265
3	Bob Johnson	bobjohnson03@gmail.com1	2378465363
4	Alice Williams	alicewilliams04@gmail.com	7834523452
5	Charlie Brown	charliebrown05@gmail.com	3278956431
6	Joel Miller	joelmiller06@gmail.com	5234789611
7	George Bush	georgebush07@gmail.com	6275123489

```
7 rows in set (0.00 sec)
```

```
mysql> Select * from purchases;
```

purchase_id	customer_id	shoe_id	quantity	purchase_date
1001	1	701	2	2024-03-05
1002	2	702	3	2024-01-01
1003	3	703	1	2024-02-05
1004	4	704	2	2024-01-23
1005	5	705	1	2024-03-01

```
5 rows in set (0.00 sec)
```

```
mysql> Select * from Sales;
```

sale_id	purchase_id	sale_date	sale_amount
3201	1001	2024-03-05	2000.00
3202	1002	2024-01-01	3000.00
3203	1003	2024-02-04	4000.00
3204	1004	2024-03-01	6000.00

```
4 rows in set (0.00 sec)
```

- **Select Distinct from table_name**

```
mysql> select distinct brand  
-> from shoes;
```

brand
Nike
Air Jordans
Adidas
Puma
Woodland

5 rows in set (0.00 sec)

```
mysql> select distinct email  
-> from customers;
```

email
alicewilliams04@gmail.com
bobjohnson03@gmail.com1
charliebrown05@gmail.com
georgebush07@gmail.com
janesmith02@gmail.com
joelmiller06@gmail.com
johndoe01@gmail.com

7 rows in set (0.00 sec)