

## SQL-1 Assignment

### 1. Create Database e\_commerce

create database e\_commerce;

Output				
Action Output				
#	Time	Action	Message	Duration / Fetch
1	20:29:06	create database e_commerce	1 row(s) affected	0.016 sec

### 2. Create following Tables:

Customers:

- customer\_id - int auto-increment primary key
- name - varchar(50)
- email - varchar(50)
- mobile - varchar(15)

create table Customers(customer\_id int primary key auto\_increment, name varchar(50), email varchar(50), mobile varchar(15));

Result Grid						
Filter Rows: <input type="text"/>						
Export:  Wrap Cell Content:						
	Field	Type	Null	Key	Default	Extra
▶	customer_id	int	NO	PRI	NULL	auto_increment
	name	varchar(50)	YES		NULL	
	email	varchar(50)	YES		NULL	
	mobile	varchar(15)	YES		NULL	

Products:

- id - int
- name - varchar(50) not null
- description - varchar(200)
- price - decimal(10, 2) not null
- category - varchar(50)

create table Products(id int, name varchar(50) not null, description varchar(200), price decimal(10,2) not null, category varchar(50));

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	Field	Type	Null	Key	Default	Extra
▶	id	int	YES		NULL	
	name	varchar(50)	NO		NULL	
	description	varchar(200)	YES		NULL	
	price	decimal(10,2)	NO		NULL	
	category	varchar(50)	YES		NULL	

### 3. Modify Tables(using Alter keyword):

#### a. Add not null on name and email in the Customers table

Alter table customers

Modify column name varchar(50) not null,

modify column email varchar(50) not null;

#### b. Add unique key on email in the Customers table

Alter table customers

Add constraint unique key(email);

#### c. Add column age in the Customers table

ALTER TABLE Customers

ADD Column age int;

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	Field	Type	Null	Key	Default	Extra
▶	customer_id	int	NO	PRI	NULL	auto_increment
	name	varchar(50)	NO		NULL	
	email	varchar(50)	NO	UNI	NULL	
	mobile	varchar(15)	YES		NULL	
	age	int	YES		NULL	

#### d. Change column name from id to product\_id in the Products table;

ALTER TABLE Products

rename COLUMN id to product\_id;

**e. Add primary key and auto increment on product\_id in the Products table**

```
ALTER TABLE Products
```

```
MODIFY COLUMN product_id int auto_increment,
```

```
ADD Constraint PRIMARY KEY(product_id);
```

**f. Change datatype of description from varchar to text in the Products table**

```
ALTER TABLE Products
```

```
MODIFY COLUMN description text;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	Field	Type	Null	Key	Default	Extra
▶	product_id	int	NO	PRI	NULL	auto_increment
	name	varchar(50)	NO		NULL	
	description	text	YES		NULL	
	price	decimal(10,2)	NO		NULL	
	category	varchar(50)	YES		NULL	

**4. Create table Order:**

- a. order\_id - int auto-increment primary key
- b. customer\_id - int -foreign key
- c. product\_id - int
- d. quantity - int not null,
- e. order\_date - date not null,
- f. status - enum(Pending, Success, Cancel),
- g. payment\_method - enum(Credit, Debit, UPI),
- h. total\_amount - decimal(10, 2) not null

```
CREATE TABLE `Order`(  
order_id int auto_increment primary key,  
customer_id int,  
product_id int,  
quantity int not null,  
order_date date not null,  
status enum('Pending', 'Success', 'Cancel'),  
total_amount decimal(10, 2) not null,  
PRIMARY KEY (order_id),  
FOREIGN KEY (customer_id) REFERENCES Customer (customer_id),  
FOREIGN KEY (product_id) REFERENCES Product (product_id),  
)
```

```

payment_method enum('Credit', 'Debit', 'UPI'),
total_amount decimal(10,2) not null,
foreign key(customer_id) References Customers(customer_id)
ON delete CASCADE
ON update Cascade
);

```

Result Grid   Filter Rows:   Export:   Wrap Cell Content:						
	Field	Type	Null	Key	Default	Extra
▶	order_id	int	NO	PRI	NULL	auto_increment
	customer_id	int	YES	MUL	NULL	
	product_id	int	YES		NULL	
	quantity	int	NO		NULL	
	order_date	date	NO		NULL	
	status	enum('Pending', 'Success', ...)	YES		NULL	
	payment_method	enum('Credit', 'Debit', 'UPI')	YES		NULL	
	total_amount	decimal(10,2)	NO		NULL	

## 5. Modify Orders Table (using Alter keyword):

### a. Change table name Order -> Orders

```

ALTER TABLE `ORDER`
RENAME TO Orders;

```

### b. Set default value pending in status.

```

ALTER TABLE ORDERS
MODIFY status enum('Pending', 'Success', 'Cancel') default 'Pending';

```

### c. Modify payment\_method ENUM to add one more value: 'COD'

```

ALTER TABLE ORDERS
MODIFY payment_method enum('CREDIT', 'Debit', 'UPI', 'COD');

```


### d. Make product id as foreign key

```


ALTER TABLE ORDERS
ADD CONSTRAINT FOREIGN KEY(product_id) REFERENCES Products(product_id)
ON DELETE CASCADE
on UPDATE CASCADE;

```


Result Grid

 Filter Rows:

Export:



Wrap Cell Content:



	Field	Type	Null	Key	Default	Extra
▶	order_id	order_id	NO	PRI	<input type="text" value="NULL"/>	auto_increment
	customer_id	int	YES	MUL	<input type="text" value="NULL"/>	
	product_id	int	YES	MUL	<input type="text" value="NULL"/>	
	quantity	int	NO		<input type="text" value="NULL"/>	
	order_date	date	NO		<input type="text" value="NULL"/>	
	status	enum('Pending','Success','Cancel')	YES		Pending	
	payment_method	enum('CREDIT','Debit','UPI','COD')	YES		<input type="text" value="NULL"/>	
	total_amount	decimal(10,2)	NO		<input type="text" value="NULL"/>	

## 6. Insert 20 sample records in all the tables.

Customers:

INSERT INTO Customers (name, email, mobile, age)

VALUES

('Alice Johnson', 'alice@example.com', '9876543210', 25),  
 ('Bob Smith', 'bob@example.com', '8765432109', 30),  
 ('Charlie Brown', 'charlie@example.com', '7654321098', 28),  
 ('David Miller', 'david@example.com', '6543210987', 35),  
 ('Emma Wilson', 'emma@example.com', '5432109876', 22),  
 ('Frank Thomas', 'frank@example.com', '4321098765', 40),  
 ('Grace Lee', 'grace@example.com', '3210987654', 27),  
 ('Henry Clark', 'henry@example.com', '2109876543', 32),  
 ('Isla White', 'isla@example.com', '1098765432', 29),  
 ('Jack Davis', 'jack@example.com', '1987654321', 26),  
 ('Kelly Green', 'kelly@example.com', '2876543210', 31),  
 ('Leo Harris', 'leo@example.com', '3765432109', 33),  
 ('Mia Adams', 'mia@example.com', '4654321098', 24),  
 ('Nathan Baker', 'nathan@example.com', '5543210987', 38),  
 ('Olivia Moore', 'olivia@example.com', '6432109876', 21),  
 ('Paul Wright', 'paul@example.com', '7321098765', 36),  
 ('Quinn Scott', 'quinn@example.com', '8210987654', 29),  
 ('Rachel Evans', 'rachel@example.com', '9109876543', 34),

```

('Steve Carter', 'steve@example.com', '1098765432', 23),
('Tina Foster', 'tina@example.com', '2198765431', 37);
INSERT INTO Customers (name, email, mobile, age) VALUES
('Sam Bennett', 'sam@example.com', '3298765432', 28),
('Uma Parker', 'uma@example.com', '4198765321', 26),
('Victor Hughes', 'victor@example.com', '5098765210', 35),
('Wendy Morris', 'wendy@example.com', '6898765109', 30),
('Xavier Reed', 'xavier@example.com', '7798765008', 40),
('Yasmine Fisher', 'yasmine@example.com', '8698764997', 24),
('Zane Cooper', 'zane@example.com', '9598764886', 27),
('Eleanor Gray', 'eleanor@example.com', '0498764775', 22),
('Oscar Phillips', 'oscar@example.com', '1398764664', 32),
('Nina Sullivan', 'nina@example.com', '2298764553', 31);

```

Result Grid					
Filter Rows:		Edit:		Export/Import:	
Wrap Cell Content:					
	customer_id	name	email	mobile	age
▶	1	Alice Johnson	alice@example.com	9876543210	25
	2	Bob Smith	bob@example.com	8765432109	30
	3	Charlie Brown	charlie@example.com	7654321098	28
	4	David Miller	david@example.com	6543210987	35
	5	Emma Wilson	emma@example.com	5432109876	22
	6	Frank Thomas	frank@example.com	4321098765	40
	7	Grace Lee	grace@example.com	3210987654	27
	8	Henry Clark	henry@example.com	2109876543	32
	9	Isla White	isla@example.com	1098765432	29
	10	Jack Davis	jack@example.com	1987654321	26
	11	Kelly Green	kelly@example.com	2876543210	31
	12	Leo Harris	leo@example.com	3765432109	33
	13	Mia Adams	mia@example.com	4654321098	24
	14	Nathan Baker	nathan@example.com	5543210987	38
	15	Olivia Moore	olivia@example.com	6432109876	21
	16	Paul Wright	paul@example.com	7321098765	36
	17	Quinn Scott	quinn@example.com	8210987654	29
	18	Rachel Evans	rachel@example.com	9109876543	34
	19	Steve Carter	steve@example.com	1098765432	23
	20	Tina Foster	tina@example.com	2198765431	37
	33	Sam Bennett	sam@example.com	3298765432	28
	34	Uma Parker	uma@example.com	4198765321	26

Customers 14 ×

## Products:

INSERT INTO Products (name, description, price, category) VALUES

('Laptop', 'High-performance laptop with 16GB RAM and 512GB SSD.', 1200.00, 'Electronics'),  
( 'Smartphone', 'Latest model smartphone with 5G support.', 800.00, 'Electronics'),  
( 'Headphones', 'Noise-canceling over-ear headphones.', 150.00, 'Accessories'),  
( 'Smartwatch', 'Fitness smartwatch with heart rate monitoring.', 250.00, 'Wearables'),  
( 'Bluetooth Speaker', 'Portable Bluetooth speaker with deep bass.', 100.00, 'Accessories'),  
( 'Gaming Console', 'Next-gen gaming console with 4K support.', 500.00, 'Gaming'),  
( 'Wireless Mouse', 'Ergonomic wireless mouse with fast response.', 40.00, 'Accessories'),  
( 'Mechanical Keyboard', 'RGB mechanical keyboard with blue switches.', 80.00, 'Accessories'),  
( 'External Hard Drive', '2TB external hard drive for backup storage.', 90.00, 'Storage'),  
( 'Smart TV', '55-inch 4K Ultra HD Smart TV.', 700.00, 'Electronics'),  
( 'Tablet', '10-inch tablet with stylus support.', 450.00, 'Electronics'),  
( 'Fitness Band', 'Waterproof fitness band with step tracking.', 70.00, 'Wearables'),  
( 'Drone', 'Quadcopter drone with 4K camera.', 600.00, 'Electronics'),  
( 'Camera', 'DSLR camera with 24MP sensor.', 1000.00, 'Photography'),  
( 'Tripod', 'Adjustable tripod stand for cameras.', 50.00, 'Photography'),  
( 'Microwave Oven', '800W microwave with grill function.', 200.00, 'Home Appliances'),  
( 'Refrigerator', 'Double-door refrigerator with inverter technology.', 900.00, 'Home Appliances'),  
( 'Air Conditioner', 'Split AC with fast cooling technology.', 1100.00, 'Home Appliances'),  
( 'Washing Machine', 'Front-load washing machine with 6kg capacity.', 850.00, 'Home Appliances'),  
( 'Electric Kettle', '1.5L electric kettle with auto shut-off.', 30.00, 'Home Appliances');

INSERT INTO Products (name, description, price, category) VALUES

('Smart Door Lock', 'Fingerprint and password-enabled smart lock.', 180.00, 'Home Security'),  
( 'Gaming Chair', 'Ergonomic gaming chair with lumbar support.', 250.00, 'Furniture'),  
( 'Power Bank', '20000mAh power bank with fast charging support.', 60.00, 'Accessories'),  
( 'Monitor', '27-inch 144Hz gaming monitor.', 350.00, 'Electronics'),  
( 'Graphic Tablet', 'Drawing tablet with stylus and pressure sensitivity.', 280.00, 'Electronics'),  
( 'Projector', 'Full HD home theater projector.', 500.00, 'Electronics'),



```









('Coffee Maker', 'Automatic coffee maker with milk frother.', 150.00, 'Home Appliances'),
('Treadmill', 'Motorized treadmill with incline settings.', 750.00, 'Fitness'),
('VR Headset', 'Virtual reality headset with motion controllers.', 400.00, 'Gaming'),
('Electric Scooter', 'Foldable electric scooter with 25km range.', 700.00, 'Transport');

INSERT INTO Products (name, description, price, category)

VALUES

('Smart Lamp', 'WiFi-enabled smart lamp with voice control.', 60.00, 'Home Appliances'),
('VR Headset', 'Virtual reality headset for immersive gaming.', 300.00, 'Gaming'),
('Graphic Tablet', 'Digital drawing tablet with stylus.', 150.00, 'Accessories'),
('Security Camera', 'Wireless security camera with night vision.', 120.00, 'Electronics'),
('Coffee Maker', 'Automatic coffee machine with grinder.', 250.00, 'Home Appliances');

```

Result Grid   Filter Rows: <input type="text"/> Edit:    Export/Import:   Wrap Cell Content: 					
	product_id	name	description	price	category
▶	1	Laptop	High-performance laptop with 16GB RAM and 512GB SSD.	1200.00	Electronics
	2	Smartphone	Latest model smartphone with 5G support.	800.00	Electronics
	3	Headphones	Noise-canceling over-ear headphones.	150.00	Accessories
	4	Smartwatch	Fitness smartwatch with heart rate monitoring.	250.00	Wearables
	5	Bluetooth Speaker	Portable Bluetooth speaker with deep bass.	100.00	Accessories
	6	Gaming Console	Next-gen gaming console with 4K support.	500.00	Gaming
	7	Wireless Mouse	Ergonomic wireless mouse with fast response.	40.00	Accessories
	8	Mechanical Keyboard	RGB mechanical keyboard with blue switches.	80.00	Accessories
	9	External Hard Drive	2TB external hard drive for backup storage.	90.00	Storage
	10	Smart TV	55-inch 4K Ultra HD Smart TV.	700.00	Electronics
	11	Tablet	10-inch tablet with stylus support.	450.00	Electronics
	12	Fitness Band	Waterproof fitness band with step tracking.	70.00	Wearables
	13	Drone	Quadcopter drone with 4K camera.	600.00	Electronics
	14	Camera	DSLR camera with 24MP sensor.	1000.00	Photography
	15	Tripod	Adjustable tripod stand for cameras.	50.00	Photography
	16	Microwave Oven	800W microwave with grill function.	200.00	Home Appliances
	17	Refrigerator	Double-door refrigerator with inverter technology.	900.00	Home Appliances
	18	Air Conditioner	Split AC with fast cooling technology.	1100.00	Home Appliances
	19	Washing Machine	Front-load washing machine with 6kg capacity.	850.00	Home Appliances
	20	Electric Kettle	1.5L electric kettle with auto shut-off.	30.00	Home Appliances
	41	Smart Door Lock	Fingerprint and password-enabled smart lock.	180.00	Home Security
	42	Gaming Chair	Ergonomic gaming chair with lumbar support.	250.00	Furniture
	43	Power Bank	20000mAh power bank with fast charging support.	60.00	Accessories
	44	Monitor	27-inch 144Hz gaming monitor.	350.00	Electronics
	45	Graphic Tablet	Drawing tablet with stylus and pressure sensitivity.	280.00	Electronics

products 15 ×



## Orders:

```
INSERT INTO Orders (customer_id, product_id, quantity, order_date, status, payment_method, total_amount) VALUES
```

```
(1, 1, 2, '2024-02-01', 'Pending', 'Credit', 2400.00),  
(2, 3, 1, '2024-02-02', 'Success', 'Debit', 150.00),  
(3, 5, 3, '2024-02-03', 'Cancel', 'UPI', 300.00),  
(4, 7, 2, '2024-02-04', 'Success', 'CREDIT', 80.00),  
(5, 9, 5, '2024-02-05', 'Pending', 'Debit', 450.00),  
(6, 11, 1, '2024-02-06', 'Success', 'UPI', 450.00),  
(7, 13, 4, '2024-02-07', 'Cancel', 'CREDIT', 2400.00),  
(8, 15, 2, '2024-02-08', 'Pending', 'Debit', 100.00),  
(9, 17, 3, '2024-02-09', 'Success', 'UPI', 3300.00),  
(10, 19, 1, '2024-02-10', 'Cancel', 'CREDIT', 850.00),  
(11, 2, 2, '2024-02-11', 'Pending', 'Debit', 1600.00),  
(12, 4, 5, '2024-02-12', 'Success', 'UPI', 250.00),  
(13, 6, 1, '2024-02-13', 'Cancel', 'CREDIT', 500.00),  
(14, 8, 3, '2024-02-14', 'Pending', 'Debit', 270.00),  
(15, 10, 4, '2024-02-15', 'Success', 'UPI', 2800.00),  
(16, 12, 2, '2024-02-16', 'Cancel', 'CREDIT', 140.00),  
(17, 14, 3, '2024-02-17', 'Pending', 'Debit', 3000.00),  
(18, 16, 5, '2024-02-18', 'Success', 'UPI', 1000.00),  
(19, 18, 1, '2024-02-19', 'Cancel', 'CREDIT', 1100.00),  
(20, 20, 2, '2024-02-20', 'Pending', 'Debit', 60.00);
```

```
INSERT INTO Orders (customer_id, product_id, quantity, order_date, status, payment_method, total_amount) VALUES
```

```
(1, 41, 1, '2024-02-21', 'Success', 'UPI', 180.00),  
(2, 42, 2, '2024-02-22', 'Pending', 'CREDIT', 500.00),  
(3, 43, 3, '2024-02-23', 'Cancel', 'Debit', 180.00),  
(4, 44, 1, '2024-02-24', 'Success', 'UPI', 350.00),
```

(5, 45, 2, '2024-02-25', 'Pending', 'CREDIT', 560.00),  
 (6, 46, 1, '2024-02-26', 'Success', 'Debit', 500.00),  
 (7, 47, 3, '2024-02-27', 'Cancel', 'UPI', 450.00),  
 (8, 48, 2, '2024-02-28', 'Pending', 'CREDIT', 300.00),  
 (9, 49, 1, '2024-02-29', 'Success', 'Debit', 700.00),  
 (10, 50, 4, '2024-03-01', 'Pending', 'UPI', 2800.00);

Result Grid		Filter Rows:		Edit:		Export/Import:		Wrap Cell Content:	
	order_id	customer_id	product_id	quantity	order_date	status	payment_method	total_amount	
▶	1	1	1	2	2024-02-01	Pending	CREDIT	2400.00	
	2	2	3	1	2024-02-02	Success	Debit	150.00	
	3	3	5	3	2024-02-03	Cancel	UPI	300.00	
	4	4	7	2	2024-02-04	Success	CREDIT	80.00	
	5	5	9	5	2024-02-05	Pending	Debit	450.00	
	6	6	11	1	2024-02-06	Success	UPI	450.00	
	7	7	13	4	2024-02-07	Cancel	CREDIT	2400.00	
	8	8	15	2	2024-02-08	Pending	Debit	100.00	
	9	9	17	3	2024-02-09	Success	UPI	3300.00	
	10	10	19	1	2024-02-10	Cancel	CREDIT	850.00	
	11	11	2	2	2024-02-11	Pending	Debit	1600.00	
	12	12	4	5	2024-02-12	Success	UPI	250.00	
	13	13	6	1	2024-02-13	Cancel	CREDIT	500.00	
	14	14	8	3	2024-02-14	Pending	Debit	270.00	
	15	15	10	4	2024-02-15	Success	UPI	2800.00	
	16	16	12	2	2024-02-16	Cancel	CREDIT	140.00	
	17	17	14	3	2024-02-17	Pending	Debit	3000.00	
	18	18	16	5	2024-02-18	Success	UPI	1000.00	
	19	19	18	1	2024-02-19	Cancel	CREDIT	1100.00	
	20	20	20	2	2024-02-20	Pending	Debit	60.00	
	31	1	41	1	2024-02-21	Success	UPI	180.00	
	32	2	42	2	2024-02-22	Pending	CREDIT	500.00	
	33	3	43	3	2024-02-23	Cancel	Debit	180.00	
	34	4	44	1	2024-02-24	Success	UPI	350.00	
	35	5	45	2	2024-02-25	Pending	CREDIT	560.00	
	--	-	--	.	----	-	-	----	

## 7. Perform following queries:

- a. Count the number of products as product\_count in each category.

```
SELECT category, count(name) AS product_count
FROM Products
group by category;
```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
category	product_count		
Electronics	8		
Home Appliances	6		
Accessories	5		
Wearables	2		
Gaming	2		
Photography	2		
Storage	1		
Home Security	1		
Furniture	1		
Fitness	1		
Transport	1		

- b. Retrieve all products that belong to the 'Electronics' category, have a price between \$50 and \$500, and whose name contains the letter 'a'.

```
SELECT * from Products
where category='Electronics' AND
price between 5 and 500 AND
name like '%a%';
```

Result Grid	Filter Rows:	Edit:	Export/Import:	Wrap Cell Content:
product_id	name	description	price	category
11	Tablet	10-inch tablet with stylus support.	450.00	Electronics
45	Graphic Tablet	Drawing tablet with stylus and pressure sensitivity.	280.00	Electronics
NULL	NULL	NULL	NULL	NULL

- c. Get the top 5 most expensive products in the 'Electronics' category, skipping the first 2.

```
select name, price
from products
where category='Electronics'
order by price DESC
limit 5 offset 2;
```

Result Grid	Filter Rows:
name	price
Smart TV	700.00
Drone	600.00
Projector	500.00
Tablet	450.00
Monitor	350.00

- d. Retrieve customers who have not placed any orders.

```
SELECT c.*, o.order_id from customers c
LEFT JOIN orders o ON c.customer_id=o.customer_id
where o.order_id is NULL;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	customer_id	name	email	mobile	age	order_id
▶	33	Sam Bennett	sam@example.com	3298765432	28	NULL
	34	Uma Parker	uma@example.com	4198765321	26	NULL
	35	Victor Hughes	victor@example.com	5098765210	35	NULL
	36	Wendy Morris	wendy@example.com	6898765109	30	NULL
	37	Xavier Reed	xavier@example.com	7798765008	40	NULL
	38	Yasmine Fisher	yasmine@example.com	8698764997	24	NULL
	39	Zane Cooper	zane@example.com	9598764886	27	NULL
	40	Eleanor Gray	eleanor@example.com	0498764775	22	NULL
	41	Oscar Phillips	oscar@example.com	1398764664	32	NULL
	42	Nina Sullivan	nina@example.com	2298764553	31	NULL

- e. Find the average total amount spent by each customer.

```
SELECT o.customer_id, c.name AS customer_name, AVG(o.total_amount) AS average_spent
FROM Orders o
JOIN Customers c ON o.customer_id = c.customer_id
GROUP BY o.customer_id, c.name
ORDER BY average_spent DESC;
```

Result Grid				Filter Rows:	Export:	Wrap Cell Content:
	customer_id	customer_name	average_spent			
▶	17	Quinn Scott	3000.000000			
	15	Olivia Moore	2800.000000			
	9	Isla White	2000.000000			
	10	Jack Davis	1825.000000			
	11	Kelly Green	1600.000000			
	7	Grace Lee	1425.000000			
	1	Alice Johnson	1290.000000			
	19	Steve Carter	1100.000000			
	18	Rachel Evans	1000.000000			
	5	Emma Wilson	505.000000			
	13	Mia Adams	500.000000			
	6	Frank Thomas	475.000000			
	2	Bob Smith	325.000000			
	14	Nathan Baker	270.000000			
	12	Leo Harris	250.000000			
	3	Charlie Brown	240.000000			
	4	David Miller	215.000000			
	8	Henry Clark	200.000000			
	16	Paul Wright	140.000000			
	20	Tina Foster	60.000000			

f. **Get the products that have a price less than the average price of all products.**

SELECT name from products

where price < (SELECT avg(price) from products);

	name
▶	Headphones
	Smartwatch
	Bluetooth Speaker
	Wireless Mouse
	Mechanical Keyboard
	External Hard Drive
	Fitness Band
	Tripod
	Microwave Oven
	Electric Kettle
	Smart Door Lock
	Gaming Chair
	Power Bank
	Monitor
	Graphic Tablet
	Coffee Maker
	VR Headset

**g. Calculate the total quantity of products ordered by each customer:**

```
SELECT o.customer_id, c.name AS customer_name, SUM(o.quantity) AS total_products_ordered
FROM Orders o
JOIN Customers c ON o.customer_id = c.customer_id
GROUP BY o.customer_id, c.name
ORDER BY total_products_ordered DESC;
```

Result Grid	Filter Rows:	Export:
customer_id	customer_name	total_products_ordered
5	Emma Wilson	7
7	Grace Lee	7
3	Charlie Brown	6
10	Jack Davis	5
12	Leo Harris	5
18	Rachel Evans	5
8	Henry Clark	4
9	Isla White	4
15	Olivia Moore	4
1	Alice Johnson	3
2	Bob Smith	3
4	David Miller	3
14	Nathan Baker	3
17	Quinn Scott	3
6	Frank Thomas	2
11	Kelly Green	2
16	Paul Wright	2
20	Tina Foster	2
13	Mia Adams	1
19	Steve Carter	1

**h. List all orders along with customer name and product name.**

```
Select p.name, p.price
from orders o
RIGHT join Products p
ON o.product_id=p.product_id
```



where o.order\_id is NULL;

Result Grid		Filter Rows:		Export:		Wrap Cell Content:	
	order_id	customer_name	product_name	order_date	status	payment_method	total_amount
▶	1	Alice Johnson	Laptop	2024-02-01	Pending	CREDIT	2400.00
	2	Bob Smith	Headphones	2024-02-02	Success	Debit	150.00
	3	Charlie Brown	Bluetooth Speaker	2024-02-03	Cancel	UPI	300.00
	4	David Miller	Wireless Mouse	2024-02-04	Success	CREDIT	80.00
	5	Emma Wilson	External Hard Drive	2024-02-05	Pending	Debit	450.00
	6	Frank Thomas	Tablet	2024-02-06	Success	UPI	450.00
	7	Grace Lee	Drone	2024-02-07	Cancel	CREDIT	2400.00
	8	Henry Clark	Tripod	2024-02-08	Pending	Debit	100.00
	9	Isla White	Refrigerator	2024-02-09	Success	UPI	3300.00
	10	Jack Davis	Washing Machine	2024-02-10	Cancel	CREDIT	850.00
	11	Kelly Green	Smartphone	2024-02-11	Pending	Debit	1600.00
	12	Leo Harris	Smartwatch	2024-02-12	Success	UPI	250.00
	13	Mia Adams	Gaming Console	2024-02-13	Cancel	CREDIT	500.00
	14	Nathan Baker	Mechanical Keyboard	2024-02-14	Pending	Debit	270.00
	15	Olivia Moore	Smart TV	2024-02-15	Success	UPI	2800.00
	16	Paul Wright	Fitness Band	2024-02-16	Cancel	CREDIT	140.00
	17	Quinn Scott	Camera	2024-02-17	Pending	Debit	3000.00
	18	Rachel Evans	Microwave Oven	2024-02-18	Success	UPI	1000.00
	19	Steve Carter	Air Conditioner	2024-02-19	Cancel	CREDIT	1100.00
	20	Tina Foster	Electric Kettle	2024-02-20	Pending	Debit	60.00
	31	Alice Johnson	Smart Door Lock	2024-02-21	Success	UPI	180.00
	32	Bob Smith	Gaming Chair	2024-02-22	Pending	CREDIT	500.00
	33	Charlie Brown	Power Bank	2024-02-23	Cancel	Debit	180.00
	34	David Miller	Monitor	2024-02-24	Success	UPI	350.00
	35	Emma Wilson	Graphic Tablet	2024-02-25	Pending	CREDIT	560.00
	36	Frank Thomas	Pen Drive	2024-02-26	Success	Debit	500.00

**i. Find products that have never been ordered.**



Select p.name, p.price

from orders o

RIGHT join Products p

ON o.product\_id=p.product\_id

where o.order\_id is NULL;

Result Grid		 Filter Rows:	 Export:
	name	price	
▶	Smart Lamp	60.00	
	VR Headset	300.00	
	Graphic Tablet	150.00	
	Security Camera	120.00	
	Coffee Maker	250.00	