

mysql Formative Assessment 1

Limit to 1000 rows

SQL Additions

1 ## 1. Create the following tables inside the database 'global\_store\_db'

2

3 • CREATE DATABASE IF NOT EXISTS global\_store\_db;

4 • USE global\_store\_db;

5

6 • CREATE TABLE products (

product\_id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(100),

price DECIMAL(10,2),

quantity INT

11 );

12

13 • CREATE TABLE orders (

order\_id INT AUTO\_INCREMENT PRIMARY KEY,

product\_id INT,

quantity\_ordered INT,

order\_date DATE,

FOREIGN KEY (product\_id) REFERENCES products(product\_id)

19 );

Automatic context help the toolbar to manually current caret position automatic h

Context Help Snippets

Output

Action Output

#	Time	Action	Message
✓ 45	21:05:28	USE global_store_db	0 row(s) affected
✓ 46	21:05:41	CREATE TABLE products ( product_id INT AUTO_INCREMENT PRIMARY KEY, nam...	0 row(s) affected
✓ 47	21:05:48	CREATE TABLE orders ( order_id INT AUTO_INCREMENT PRIMARY KEY, product_i...	0 row(s) affected

```
19 ~ );
20
21 ## 2.Alter the products table to add a new column named category (VARCHAR(50)) after the price column
22
23 • ALTER TABLE products ADD category VARCHAR(50) AFTER price;
24 • select * from products;
25 ##3. Revert the products table to default
```

Result Grid Filter Rows:  | Edit: | Export/Import: | Wrap Cell Content:

	product_id	name	price	category	quantity
*	NULL	NULL	NULL	NULL	NULL

Output

Action Output

#	Time	Action	Message
✓ 47	21:05:48	CREATE TABLE orders ( order_id INT AUTO_INCREMENT PRIMARY KEY, product_i...	0 row(s) affected
✓ 48	21:13:17	ALTER TABLE products ADD category VARCHAR(50) AFTER price	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0
✓ 49	21:16:29	select * from products LIMIT 0, 1000	0 row(s) returned

```
25  ##3. Rename the products table to inventory.
26
27  • ALTER TABLE products RENAME TO inventory;
28
29  ## 4. Insert at least 10 records into the inventory table and 5 records into orders table and display
30  • INSERT INTO inventory (name, price, quantity, category) VALUES
31    ('Laptop', 1000, 20, 'Electronics'),
32    ('Smartphone', 700, 50, 'Electronics'),
33    ('Headphones', 150, 100, 'Accessories'),
34    ('Keyboard', 45, 70, 'Accessories'),
35    ('Monitor', 300, 40, 'Electronics'),
36    ('Mouse', 25, 80, 'Accessories'),
37    ('Tablet', 400, 30, 'Electronics'),
38    ('Charger', 20, 150, 'Accessories'),
39    ('Printer', 200, 10, 'Electronics'),
40    ('Webcam', 80, 60, 'Accessories');
```

current caret position or to t  
automatic help.

Output				
Action Output				
#	Time	Action	Message	Duration
✓ 48	21:13:17	ALTER TABLE products ADD category VARCHAR(50) AFTER price	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.343 sec
✓ 49	21:16:29	select * from products LIMIT 0, 1000	0 row(s) returned	0.000 sec
✓ 50	21:17:35	ALTER TABLE products RENAME TO inventory	0 row(s) affected	0.328 sec



```
51
52  ## 5.a) Write a query to display distinct categories from the inventory table.
53
54  • SELECT DISTINCT category FROM inventory;
55
56  ## 5.b) Select the top 5 products by their prices in descending order from the inventory table.
57
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	category
▶	Electronics
	Accessories

inventory 13 ×

Read Only

Context Hel

Output

Action Output

#	Time	Action	Message
✓ 51	21:18:23	INSERT INTO inventory (name, price, quantity, category) VALUES ('Laptop', 1000, 20, 'Elec...	10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0
✓ 52	21:18:31	INSERT INTO orders (product_id, quantity_ordered, order_date) VALUES (1, 2, '2024-09-01...	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0
✓ 53	21:19:41	SELECT DISTINCT category FROM inventory LIMIT 0, 1000	2 row(s) returned

```
55
56 ## 5.b) Select the top 5 products by their prices in descending order from the inventory table.
57
58 • SELECT name, price FROM inventory ORDER BY price DESC LIMIT 5;
59
60 ## 5.c) Display the names of products with a quantity greater than 10 from the inventory table.
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows: |

	name	price
▶	Laptop	1000.00
	Smartphone	700.00
	Tablet	400.00
	Monitor	300.00
	Printer	200.00

inventory 14 x Read Only Context Help Snippets

Output

#	Time	Action	Message
✓ 52	21:18:31	INSERT INTO orders (product_id, quantity_ordered, order_date) VALUES (1, 2, '2024-09-01...	5 row(s) affected Records: 5 Duplicates: 0 Warnings: 0
✓ 53	21:19:41	SELECT DISTINCT category FROM inventory LIMIT 0, 1000	2 row(s) returned
✓ 54	21:20:21	SELECT name, price FROM inventory ORDER BY price DESC LIMIT 5	5 row(s) returned

```
59
60 ## 5.c) Display the names of products with a quantity greater than 10 from the inventory table.
61
62 • SELECT name FROM inventory WHERE quantity > 10;
63
64 ## 5.d) Use the SUM() function to calculate the total price of all products in the inventory table.
```


Result Grid  Filter Rows:  Export:  Wrap Cell Content: 

name
Laptop
Smartphone
Headphones
Keyboard
Monitor
Mouse
Tablet

inventory 15 x

 Read Only [Context Help](#) [Snippets](#)

Output

 Action Output

#	Time	Action	Message
✓ 53	21:19:41	SELECT DISTINCT category FROM inventory LIMIT 0, 1000	2 row(s) returned
✓ 54	21:20:21	SELECT name, price FROM inventory ORDER BY price DESC LIMIT 5	5 row(s) returned
✓ 55	21:21:00	SELECT name FROM inventory WHERE quantity > 10 LIMIT 0, 1000	9 row(s) returned

current caret position  
automatically

```
63
64 ## 5.d) Use the SUM() function to calculate the total price of all products in the inventory table.
65
66 • SELECT SUM(price * quantity) AS total_price_of_products FROM inventory;
67
68 ## 5.e) Group products by their categories and display the count of products in each category.
69
70 • SELECT category, COUNT(*) AS product_count FROM inventory GROUP BY category;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

total_price_of_products
108950.00

Result 16 x Read Only

Context Help Snippets

Output

Action Output

#	Time	Action	Message
✓ 54	21:20:21	SELECT name, price FROM inventory ORDER BY price DESC LIMIT 5	5 row(s) returned
✓ 55	21:21:00	SELECT name FROM inventory WHERE quantity > 10 LIMIT 0, 1000	9 row(s) returned
✓ 56	21:23:06	SELECT SUM(price * quantity) AS total_price_of_products FROM inventory LIMIT 0, 1000	1 row(s) returned



68 ## 5.e) Group products by their categories and display the count of products in each category.  
69  
70 • `SELECT category, COUNT(*) AS product_count FROM inventory GROUP BY category;`  
71  
72 ## 5.f) Write a query to identify products that are currently out of stock (i.e., quantity is zero).  
73

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	category	product_count
▶	Electronics	5
	Accessories	5

Result 17 x Read Only Context Help

Output

Action Output

#	Time	Action	Message
✓ 55	21:21:00	SELECT name FROM inventory WHERE quantity > 10 LIMIT 0, 1000	9 row(s) returned
✓ 56	21:23:06	SELECT SUM(price * quantity) AS total_price_of_products FROM inventory LIMIT 0, 1000	1 row(s) returned
✓ 57	21:24:01	SELECT category, COUNT(*) AS product_count FROM inventory GROUP BY category LIM...	2 row(s) returned

```


72  ## 5.f) Write a query to identify products that are currently out of stock (i.e., quantity is zero).
73
74  • SELECT name, price FROM inventory WHERE quantity = 0;
75
76  ## 6. Create a view named expensive_products that displays the details of products with a price above
77  • CREATE VIEW expensive_products AS SELECT * FROM inventory WHERE price > (SELECT AVG(price)

```

Result Grid   Filter Rows:  Export:  Wrap Cell Content: 



name	price
------	-------

inventory 18 x

 Read Only

Context

Output

 Action Output 

	#	Time	Action	Message
✓	56	21:23:06	SELECT SUM(price * quantity) AS total_price_of_products FROM inventory LIMIT 0, 1000	1 row(s) returned
✓	57	21:24:01	SELECT category,COUNT(*) AS product_count FROM inventory GROUP BY category LIMIT...	2 row(s) returned
✓	58	21:25:21	SELECT name,price FROM inventory WHERE quantity = 0 LIMIT 0, 1000	0 row(s) returned

auton

```
76  ## 6. Create a view named expensive_products that displays the details of products with a price above
77  CREATE VIEW expensive_products AS SELECT * FROM inventory WHERE price > (SELECT AVG(price)
78  FROM inventory);
79
80  select * from expensive_products;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	product_id	name	price	category	quantity
▶	1	Laptop	1000.00	Electronics	20
	2	Smartphone	700.00	Electronics	50
	5	Monitor	300.00	Electronics	40
	7	Tablet	400.00	Electronics	30

expensive\_products 19 x

Read Only

Context Help Snippets

Output

Action Output

	#	Time	Action	Message
✓	58	21:25:21	SELECT name, price FROM inventory WHERE quantity = 0 LIMIT 0, 1000	0 row(s) returned
✓	59	21:26:05	CREATE VIEW expensive_products AS SELECT * FROM inventory WHERE price > (SELE...	0 row(s) affected
✓	60	21:26:12	select * from expensive_products LIMIT 0, 1000	4 row(s) returned

```
82  ## 7. Write a join query to display the names of products along with the corresponding order quanti
83
84  • SELECT inventory.name, orders.quantity_ordered FROM inventory JOIN orders ON inventory.product_id = o
85
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	name	quantity_ordered
▶	Laptop	2
	Headphones	1
	Monitor	4
	Tablet	2
	Printer	1

Output

Action Output

#	Time	Action	Message
✓ 80	21:27:22	CREATE VIEW expensive_products AS SELECT * FROM inventory WHERE price > (SELE...	0 row(s) affected
✓ 81	21:27:22	select * from expensive_products LIMIT 0, 1000	4 row(s) returned
✓ 82	21:27:22	SELECT inventory.name, orders.quantity_ordered FROM inventory JOIN orders ON inventory...	5 row(s) returned