

Assessment- Database

Write SQL query to solve the problem given below:

- There given a table named as product.
- The products are the computer components like keyboard, motherboard, monitor, speaker, etc.
- The product table contains attributes like product id, product name, price and product code.
- Example of such table is given below:

PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12

ANS:

```
CREATE TABLE product
```

```
(
```

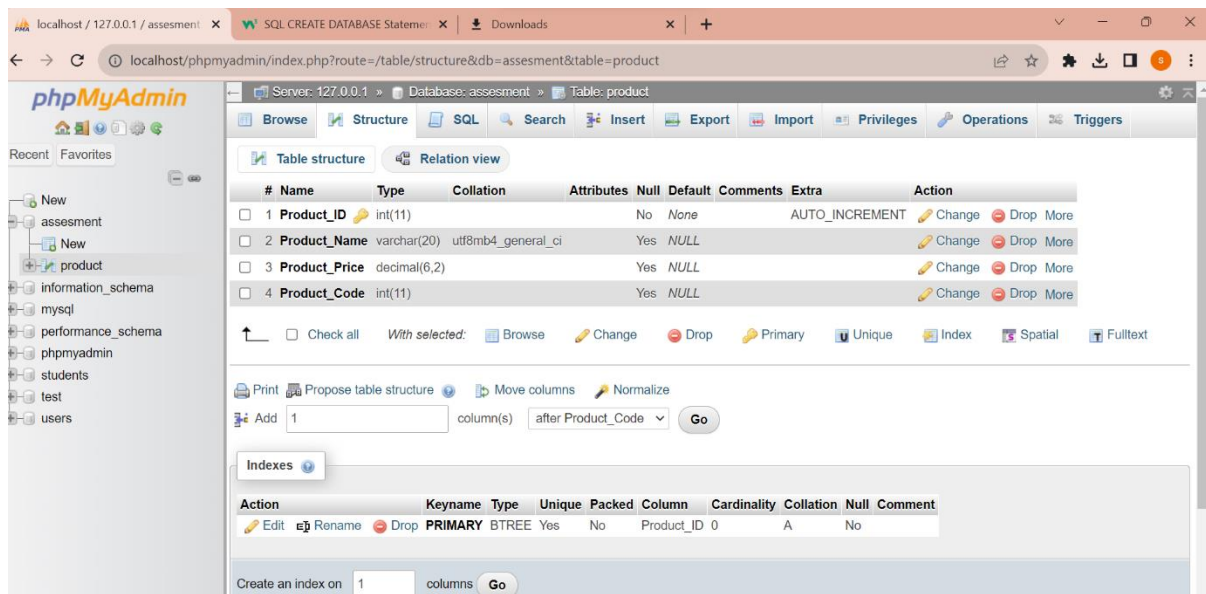
```
Product_ID INT PRIMARY KEY AUTO_INCREMENT,
```

```
Product_Name VARCHAR (20),
```

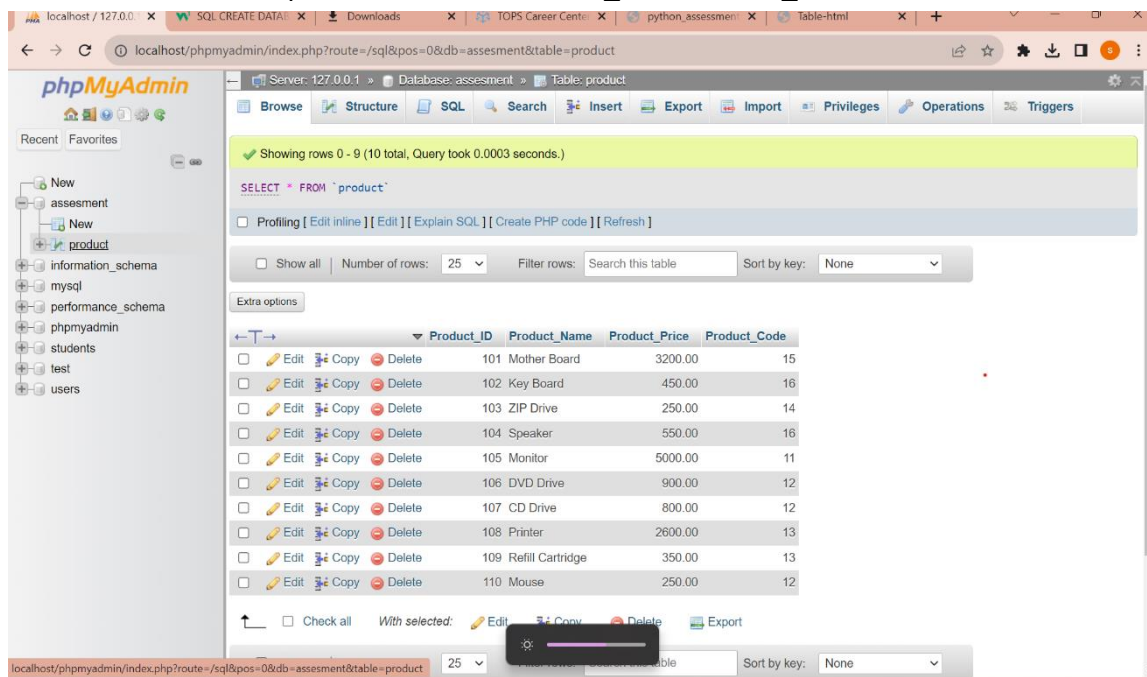
```
Product_Price DECIMAL (6,2)
```

```
Product_Code INT
```

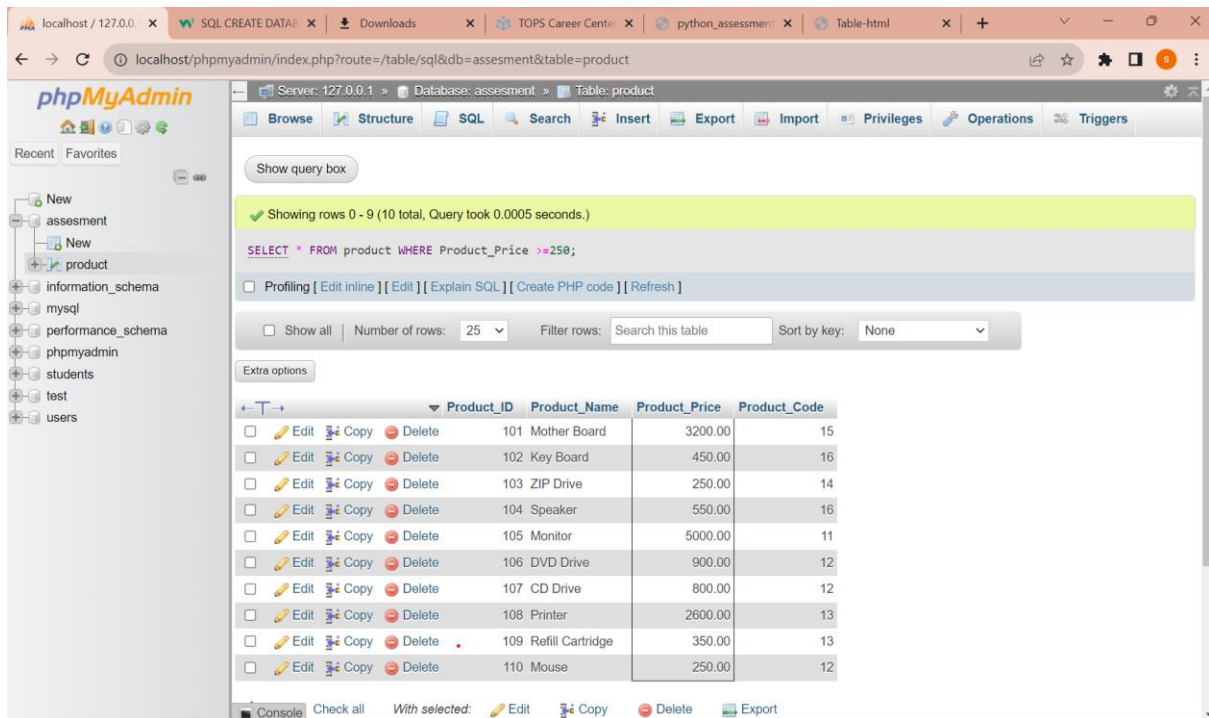
);



1. **ALTER TABLE** Persons **AUTO_INCREMENT=101**;
2. **INSERT INTO** product (ProductName, Product_Price, Product_Code) **VALUES**
('Mother Board', '3200.00', '15'), ('Key Board', '450.00', '16'), ('ZIP Drive', '250.00',
'14'), ('Speaker', '550.00', '16'), ('Monitor', '5000.00', '11'), ('DVD Drive', '900.00',
'12'), ('CD Drive', '800.00', '12'), ('Printer', '2600.00', '13'), ('Refill Cartridge', '350.00',
'13'), ('Mouse', '250.00', '12');
3. **SELECT *** FROM product **WHERE** Product_Price >=250;



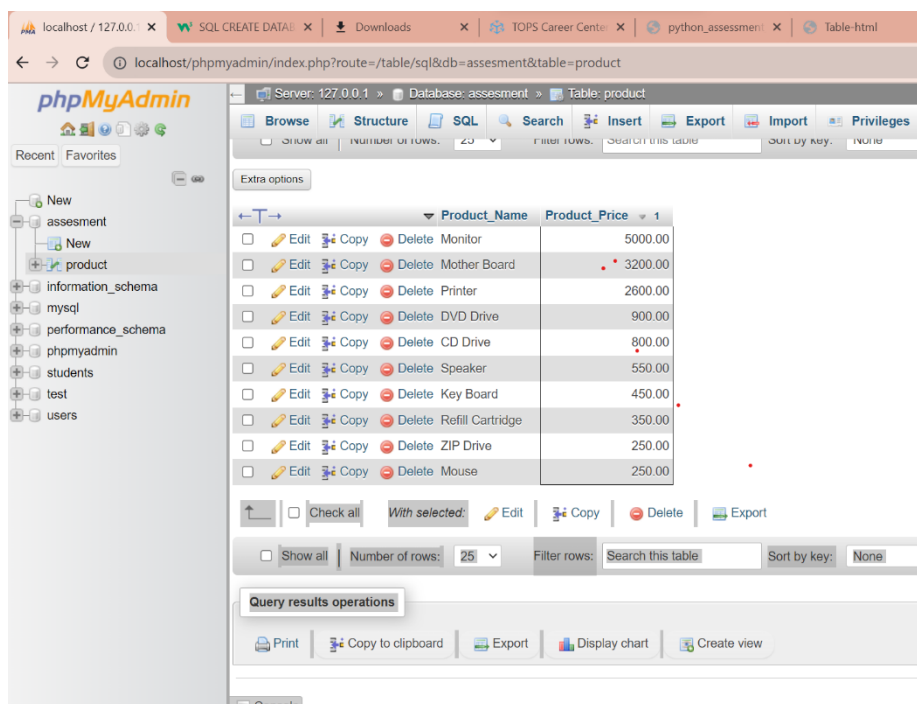
4. `SELECT * FROM product WHERE Product Price >=250;`



The screenshot shows the phpMyAdmin interface with the 'product' table selected. The SQL query `SELECT * FROM product WHERE Product Price >=250;` has been executed, resulting in 10 rows being displayed. The table has columns: Product_ID, Product_Name, Product_Price, and Product_Code.

Product_ID	Product_Name	Product_Price	Product_Code
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP Drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD Drive	900.00	12
107	CD Drive	800.00	12
108	Printer	2600.00	13
109	Refill Cartridge	350.00	13
110	Mouse	250.00	12

5. `SELECT Product_Name, Product_Price`
`FROM product`
`WHERE Product_Price >= 250.00`
`ORDER BY Product_Price DESC;`



The screenshot shows the phpMyAdmin interface with the 'product' table selected. The SQL query `SELECT Product_Name, Product_Price FROM product WHERE Product_Price >= 250.00 ORDER BY Product_Price DESC;` has been executed, resulting in 10 rows being displayed, sorted by Product_Price in descending order.

Product_Name	Product_Price
Monitor	5000.00
Mother Board	3200.00
Printer	2600.00
DVD Drive	900.00
CD Drive	800.00
Speaker	550.00
Key Board	450.00
Refill Cartridge	350.00
ZIP Drive	250.00
Mouse	250.00

6. SELECT Product_Name, Product_Price
FROM product
ORDER BY Product_Price ASC
LIMIT 1;

The screenshot shows the phpMyAdmin web interface in a browser. The address bar indicates the URL: localhost/phpmyadmin/index.php?route=/table/sql&db=assessment&table=product. The interface includes a sidebar with a database tree on the left, showing the 'assessment' database and its tables: 'product', 'information_schema', 'mysql', 'performance_schema', 'phpmyadmin', 'students', 'test', and 'users'. The main panel displays the 'Table: product' view. A 'Show query box' button is visible. The query results are shown in a green box, indicating a successful query: 'Showing rows 0 - 0 (1 total, Query took 0.0004 seconds.) [Product_Price: 250.00... - 250.00...]'. The SQL query is displayed: 'SELECT Product_Name, Product_Price FROM product ORDER BY Product_Price ASC LIMIT 1;'. Below the query, there are links for 'Profiling', 'Edit inline', 'Edit', 'Explain SQL', 'Create PHP code', and 'Refresh'. The 'Extra options' section shows a table with one row: 'Product_Name' and 'Product_Price' with a value of '250.00'. The 'Query results operations' section includes links for 'Print', 'Copy to clipboard', 'Export', 'Display chart', and 'Create view'.

localhost / 127.0.0.1 x SQL CREATE DATABASE x Downloads x TOPS Career Center x python_assessment x Table-html x +

localhost/phpmyadmin/index.php?route=/table/sql&db=assessment&table=product

phpMyAdmin

Recent Favorites

New
assessment
New
product
information_schema
mysql
performance_schema
phpmyadmin
students
test
users

Server: 127.0.0.1 » Database: assessment » Table: product

Browse Structure SQL Search Insert Export Import Privileges Operations

Show query box

Showing rows 0 - 0 (1 total, Query took 0.0004 seconds.) [Product_Price: 250.00... - 250.00...]

SELECT Product_Name, Product_Price FROM product ORDER BY Product_Price ASC LIMIT 1;

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Extra options

Product_Name	Product_Price
	250.00

Check all With selected: Edit Copy Delete Export

Query results operations

Print Copy to clipboard Export Display chart Create view

7. SELECT AVG(Product_Price) FROM product;

The screenshot shows the phpMyAdmin web interface in a browser. The address bar indicates the URL is `localhost/phpmyadmin/index.php?route=/table/sql&db=assessment&table=product`. The left sidebar shows a database structure with 'assessment' selected, containing a 'product' table. The main panel has tabs for 'Browse', 'Structure', 'SQL', 'Search', 'Insert', and 'Export', with 'SQL' being the active tab. A 'Show query box' button is present. A warning message states: 'Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and D'. Below this, a green status bar says 'Showing rows 0 - 0 (1 total, Query took 0.0005 seconds.)'. The SQL query `SELECT AVG(Product_Price) FROM product;` is entered in the text area. Below the query, there are links for 'Profiling', 'Edit inline', 'Edit', 'Explain SQL', 'Create PHP code', and 'Refresh'. A 'Show all' checkbox and a 'Number of rows' dropdown set to '25' are visible, along with a 'Filter rows' search box. An 'Extra options' button is also present. The query result is displayed in a table with one row:

AVG(Product_Price)
1435.000000

. Below the table, there are 'Show all', 'Number of rows' (25), and 'Filter rows' controls. At the bottom, a 'Query results operations' bar includes buttons for 'Print', 'Copy to clipboard', 'Export', 'Display chart', and 'Create view'.