

OctopusDB Using SQL queries

JANUARY 9

Authored by:

- Ahmed Atef
- Aya Hamed



CREATE DATABASE

```
octopusDB [ITI] >CREATE DATABASE myDB
Query Ok.
octopusDB [ITI] >SHOW DATABASES
+-----+
| Databases |
+-----+
| supermarket |
| Students    |
| newDB       |
| ITI         |
| myDB        |
+-----+
```

SHOW DATABASES

```
Welcome to the OctopusDB monitor.
octopusDB [(none)] >SHOW DATABASES
+-----+
| Databases |
+-----+
| supermarket |
| Students    |
| newDB       |
| ITI         |
| myDB        |
+-----+
```

- DROP DATABASE

```
octopusDB [ITI] >SHOW DATABASES
+-----+
| Databases |
+-----+
| supermarket |
| Students    |
| ITI         |
| myDB        |
+-----+
octopusDB [ITI] >DROP DATABASE myDB
Query Ok.
octopusDB [ITI] >SHOW DATABASES
+-----+
| Databases |
+-----+
| supermarket |
| Students    |
| ITI         |
+-----+
```

USE DATABASE

```
octopusDB [(none)] >USE ITI
Database changed.
octopusDB [ITI] >SHOW TABLES
+-----+
| Tables_in_ITI |
+-----+
| Students      |
+-----+
```

SHOW TABLES

```
octopusDB [ITI] >SHOW TABLES
+-----+
| Tables_in_ITI |
+-----+
| Students      |
+-----+
```

DROP TABLE

```
octopusDB [ITI] >SHOW TABLES
+-----+
| Tables_in_ITI |
+-----+
| Students      |
+-----+
octopusDB [ITI] >DROP TABLE Students
Query Ok.
octopusDB [ITI] >SHOW TABLES
Empty set.
octopusDB [ITI] >
```

SELECT * FROM table

```
octopusDB [ITI] >SELECT * FROM Students
+-----+-----+-----+-----+
| id | name      | address    | phone      |
+-----+-----+-----+-----+
| 2  | atef      | rehab      | 0115566775 |
| 3  | sarah     | nasrCity   | 0112225664 |
| 4  | samar     | heliopolis | 0984875     |
| 5  | sarah     | helwan     | 06774466    |
| 8  | salma     | cairo      | 048955      |
| 13 | Aya Hamed | New Cairo  | 011445433   |
+-----+-----+-----+-----+
```

SELECT columns FROM table

```
octopusDB [ITI] >SELECT id name FROM Students
1 2
+-----+-----+
| id | name      |
+-----+-----+
| 2  | atef      |
| 3  | sarah     |
| 4  | samar     |
| 5  | sarah     |
| 8  | salma     |
| 13 | Aya Hamed |
+-----+-----+
```

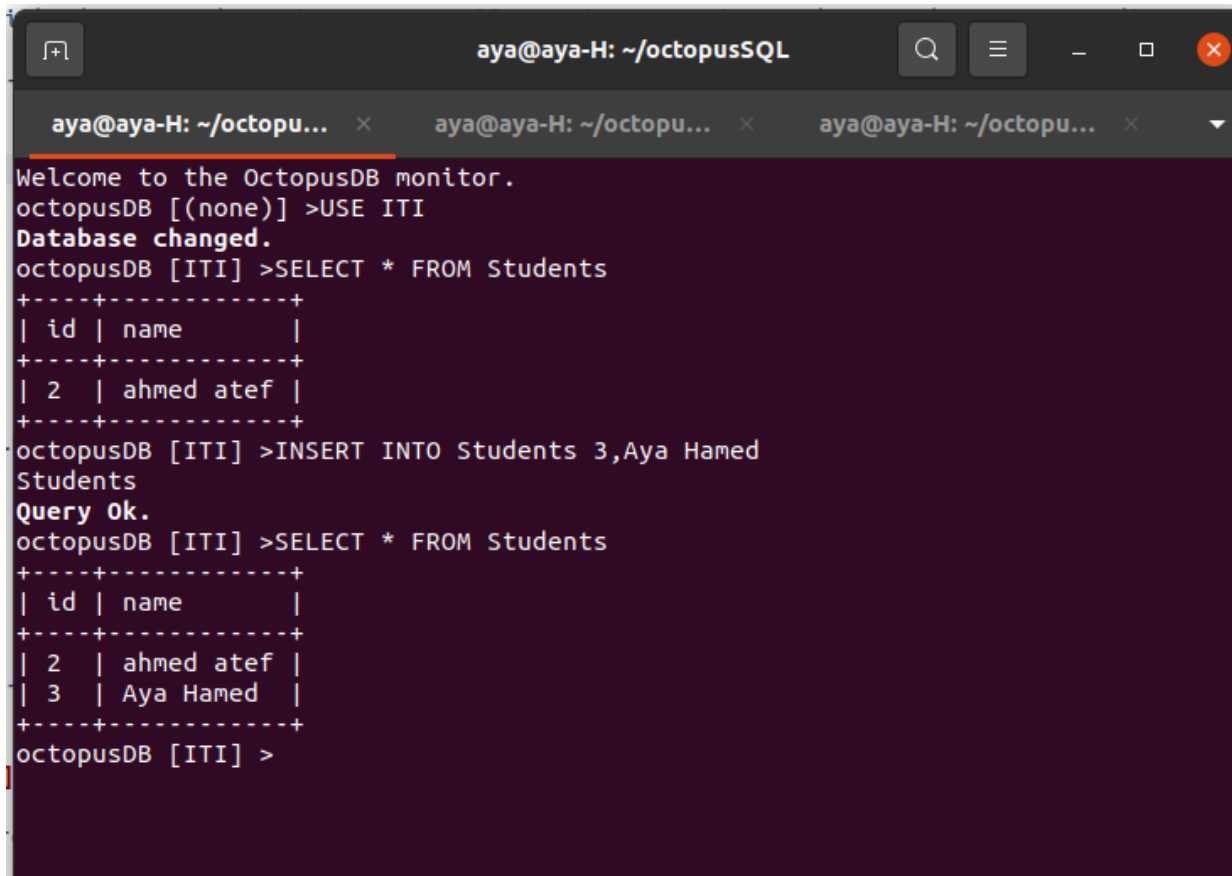
SELECT columns FROM table WHERE condition

```
Welcome to the OctopusDB monitor.  
octopusDB [(none)] >USE ITI  
Database changed.  
octopusDB [ITI] >SELECT id name FROM Students WHERE name=sarah  
1 2  
+----+-----+  
| id | name |  
+----+-----+  
| 3  | sarah |  
| 5  | sarah |  
+----+-----+
```

CREATE NEW TABLE

```
octopusDB [ITI] >CREATE TABLE Students name TEXT,id INT
ERROR: Table 'Students' already exists.
octopusDB [ITI] >CREATE TABLE Subjects id INT,name TEXT
Query Ok.
octopusDB [ITI] >SHOW TABLES
+-----+
| Tables_in_ITI |
+-----+
| Students      |
| Subjects      |
+-----+
```

INSERT INTO table SET values



The screenshot shows a terminal window titled "aya@aya-H: ~/octopusSQL". The terminal displays the following sequence of commands and output:

```
Welcome to the OctopusDB monitor.
octopusDB [(none)] >USE ITI
Database changed.
octopusDB [ITI] >SELECT * FROM Students
+-----+-----+
| id | name      |
+-----+-----+
| 2  | ahmed atef |
+-----+-----+
octopusDB [ITI] >INSERT INTO Students 3,Aya Hamed
Students
Query Ok.
octopusDB [ITI] >SELECT * FROM Students
+-----+-----+
| id | name      |
+-----+-----+
| 2  | ahmed atef |
| 3  | Aya Hamed  |
+-----+-----+
octopusDB [ITI] >
```

The output shows a table with two columns: 'id' and 'name'. Initially, it contains one row with id 2 and name 'ahmed atef'. After the INSERT command, a second row is added with id 3 and name 'Aya Hamed'.

UPDATE table SET values WHERE conditions

```
aya@aya-H: ~/octopusSQL
Welcome to the OctopusDB monitor.
octopusDB [(none)] >USE supermarket
Database changed.
octopusDB [supermarket] >SELECT * FROM items
+-----+-----+-----+-----+
| id | item          | price | quantity |
+-----+-----+-----+-----+
| 2  | cheese bites | 4      | 15        |
| 3  | milk         | 77     | 30        |
| 5  | white bread  | 3      | 50        |
| 6  | brown bread  | 3      | 60        |
+-----+-----+-----+-----+
octopusDB [supermarket] >UPDATE items SET quantity=100 WHERE price=3,id=5
Query Ok.
octopusDB [supermarket] >SELECT * FROM items
+-----+-----+-----+-----+
| id | item          | price | quantity |
+-----+-----+-----+-----+
| 2  | cheese bites | 4      | 15        |
| 3  | milk         | 77     | 30        |
| 5  | white bread  | 3      | 100       |
| 6  | brown bread  | 3      | 60        |
+-----+-----+-----+-----+
```

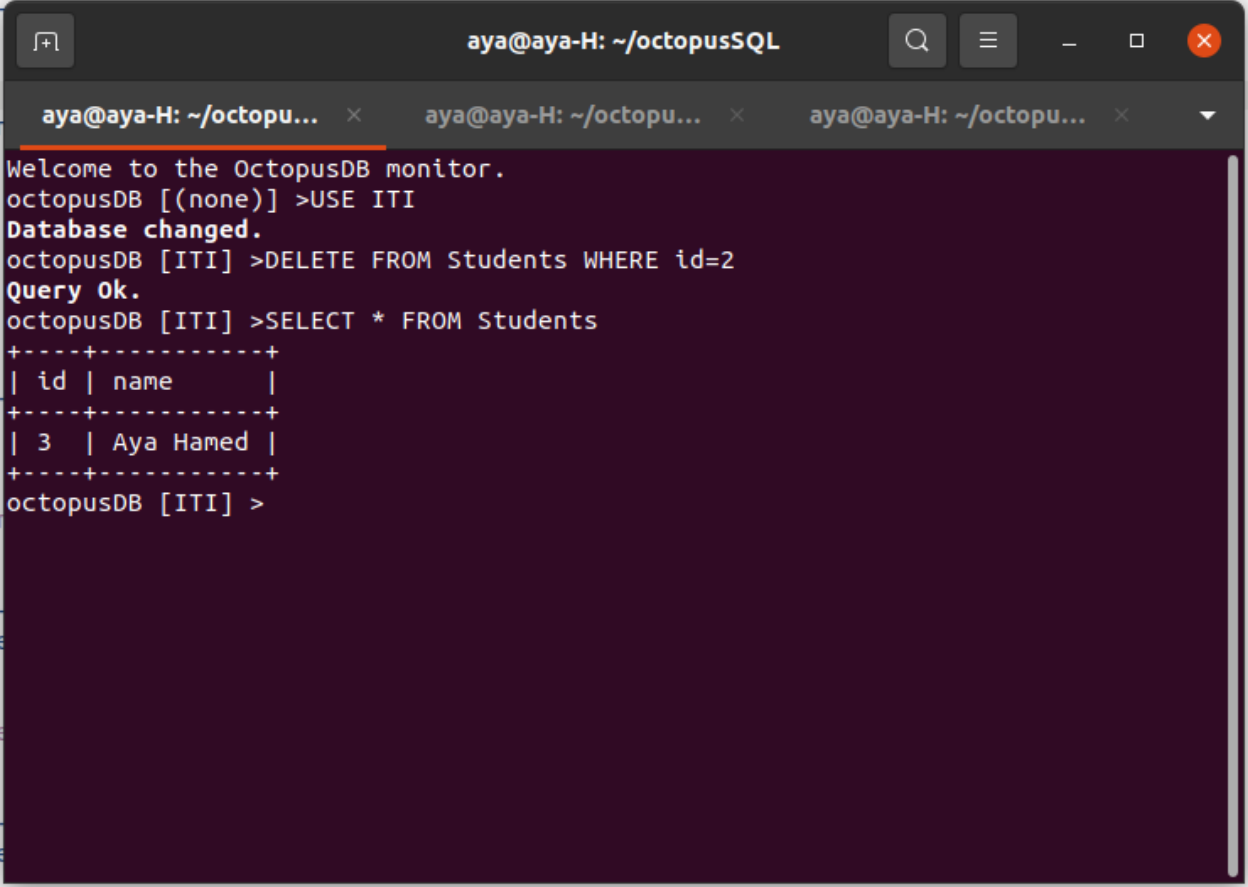
UPDATE ALL RECORDS

```
dropDB.sh  dropTable.  insertRecor  listDB.sh  listTables.  octopusSQ  openDB.sh  printTable.  select d.

aya@aya-H: ~/octopusSQL
Welcome to the OctopusDB monitor.
octopusDB [(none)] >USE supermarket
Database changed.
octopusDB [supermarket] >SELECT * FROM items
+-----+-----+-----+-----+
| id | item          | price | quantity |
+-----+-----+-----+-----+
| 2  | cheese bites | 77    | 15        |
| 3  | milk         | 77    | 30        |
| 5  | white bread  | 77    | 66        |
| 6  | brown bread  | 77    | 66        |
+-----+-----+-----+-----+
octopusDB [supermarket] >UPDATE items SET price=100
Query Ok.
octopusDB [supermarket] >SELECT * FROM items
+-----+-----+-----+-----+
| id | item          | price | quantity |
+-----+-----+-----+-----+
| 2  | cheese bites | 100   | 15        |
| 3  | milk         | 100   | 30        |
| 5  | white bread  | 100   | 66        |
| 6  | brown bread  | 100   | 66        |
+-----+-----+-----+-----+
octopusDB [supermarket] >
```

"updateAllRecord.sh" selected (4

DELETE FROM table WHERE conditions

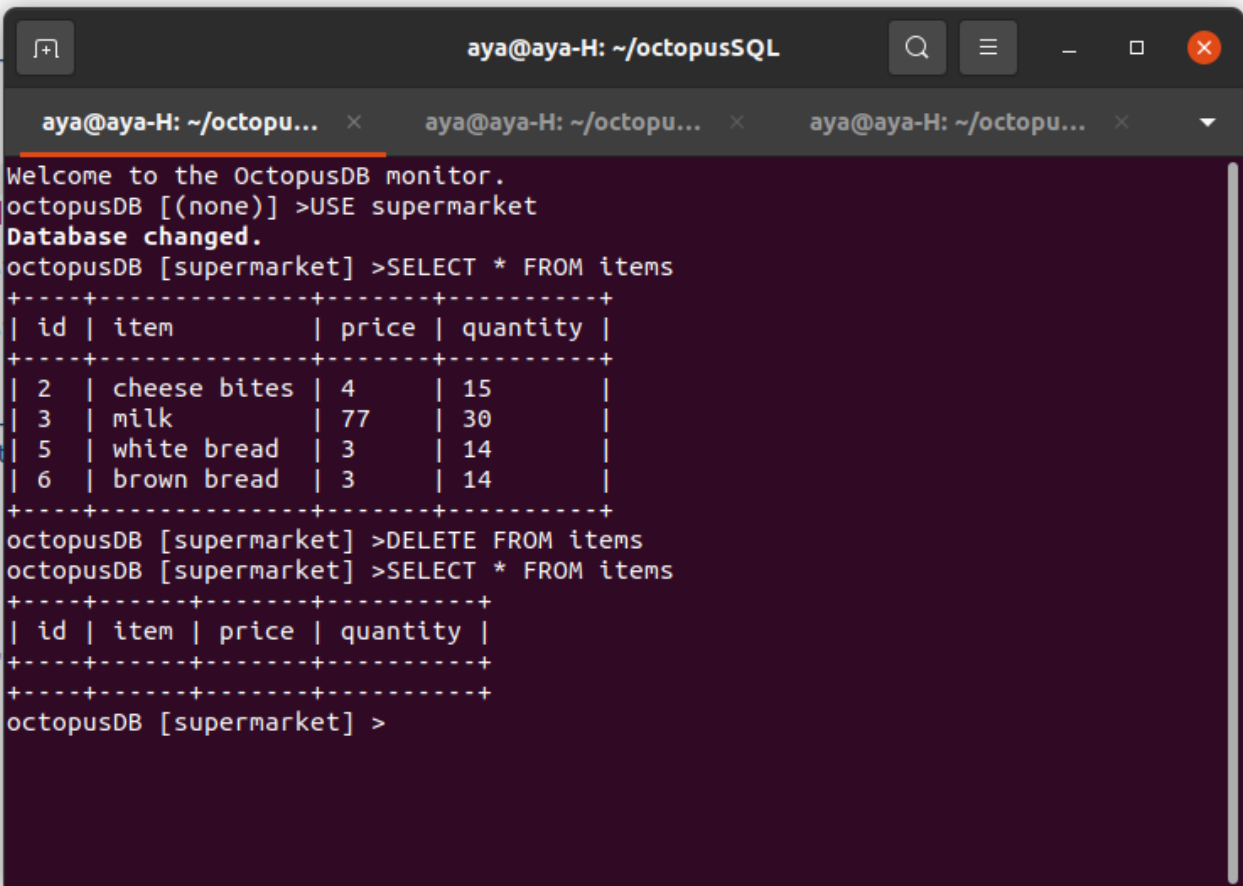


The screenshot shows a terminal window titled 'aya@aya-H: ~/octopusSQL'. The terminal output is as follows:

```
Welcome to the OctopusDB monitor.
octopusDB [(none)] >USE ITI
Database changed.
octopusDB [ITI] >DELETE FROM Students WHERE id=2
Query Ok.
octopusDB [ITI] >SELECT * FROM Students
+-----+
| id | name      |
+-----+
| 3  | Aya Hamed |
+-----+
octopusDB [ITI] >
```

The terminal window has three tabs, all titled 'aya@aya-H: ~/octopus...'. The first tab is active and highlighted with an orange underline. The terminal background is dark purple, and the text is white.

DELETE ALL RECORDS



The screenshot shows a terminal window titled 'aya@aya-H: ~/octopusSQL'. The terminal displays the following sequence of commands and output:

```
Welcome to the OctopusDB monitor.  
octopusDB [(none)] >USE supermarket  
Database changed.  
octopusDB [supermarket] >SELECT * FROM items  
+-----+-----+-----+  
| id | item       | price | quantity |  
+-----+-----+-----+  
| 2  | cheese bites | 4      | 15       |  
| 3  | milk        | 77     | 30       |  
| 5  | white bread | 3      | 14       |  
| 6  | brown bread | 3      | 14       |  
+-----+-----+-----+  
octopusDB [supermarket] >DELETE FROM items  
octopusDB [supermarket] >SELECT * FROM items  
+-----+-----+-----+  
| id | item | price | quantity |  
+-----+-----+-----+  
octopusDB [supermarket] >
```

The output shows a table with 4 columns: id, item, price, and quantity. The initial data includes 4 rows. After the DELETE command, the table is empty, as shown by the second SELECT query.