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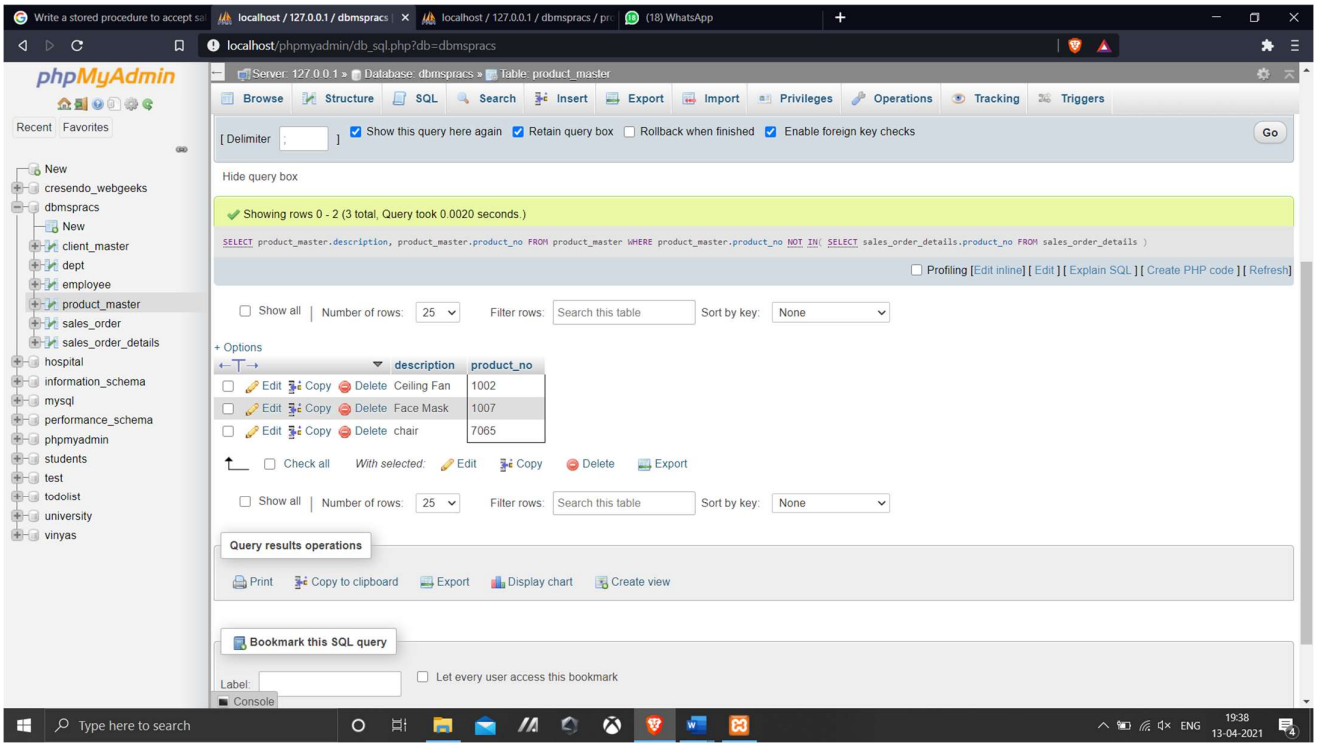
DBMS Practical Implementation, Lab 7.

0. Inserting Necessary Values:

```
INSERT INTO `client_master` (`client_no`, `name`, `address`, `city`, `pincode`, `state`, `Bal_due`) VALUES ('C0004', 'Rahul Desai', 'The Height,Indra Nagar', 'Mumbai', '400080', 'Maharashtra', '2000');

INSERT INTO `product_master` (`product_no`, `description`, `profit_percent`, `unit_measure`, `qty_on_hand`, `reorder_level`, `cost_price`, `new_price`) VALUES ('1014', '1.44 Drive', '12', '1', '250', '500', '2500', '3000');

INSERT INTO `sales_order` (`order_no`, `order_date`, `client_no`, `dely_addr`, `salesman_no`, `dely_type`, `billed_yn`, `Dely_date`, `order_status`) VALUES ('O191', '1995-04-01', 'C0004', 'The height, Indra Nagar', 'S001', 'Y', 'Y', '1995-04-14', 'Shipped');

INSERT INTO `sales_order_details` (`order_no`, `product_no`, `qty_ordered`, `qty_disp`, `product_rate`) VALUES ('O191', '1014', '25', '25', '3000');
```

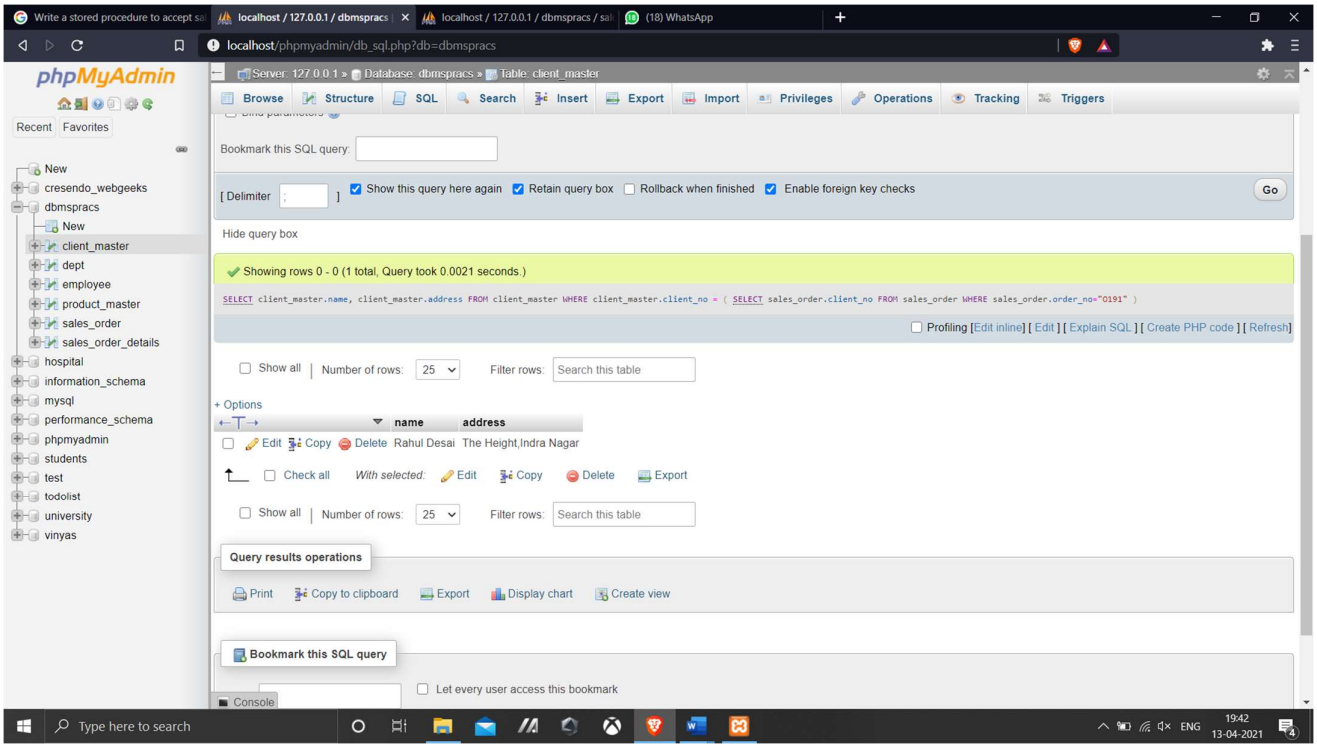
1. Find the product no. and description of non-moving products i.e. products not being sold.

```
SELECT product_master.description, product_master.product_no
FROM product_master
WHERE product_master.product_no NOT IN(
SELECT sales_order_details.product_no FROM sales_order_details
);
```



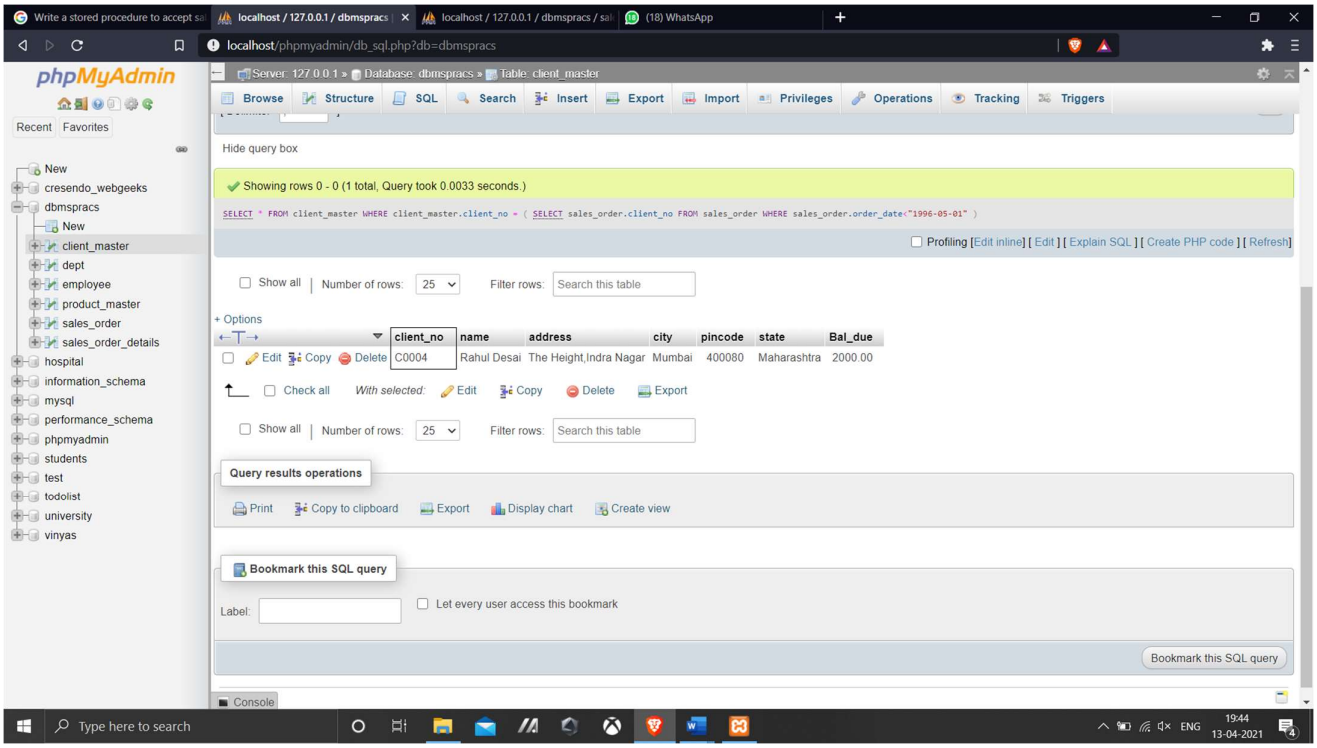
2. Find the customer name, address for the client who has placed order no ‘O191’

```
SELECT client_master.name, client_master.address
FROM client_master
WHERE client_master.client_no = (
SELECT sales_order.client_no
    FROM sales_order
    WHERE sales_order.order_no="O191"
);
```



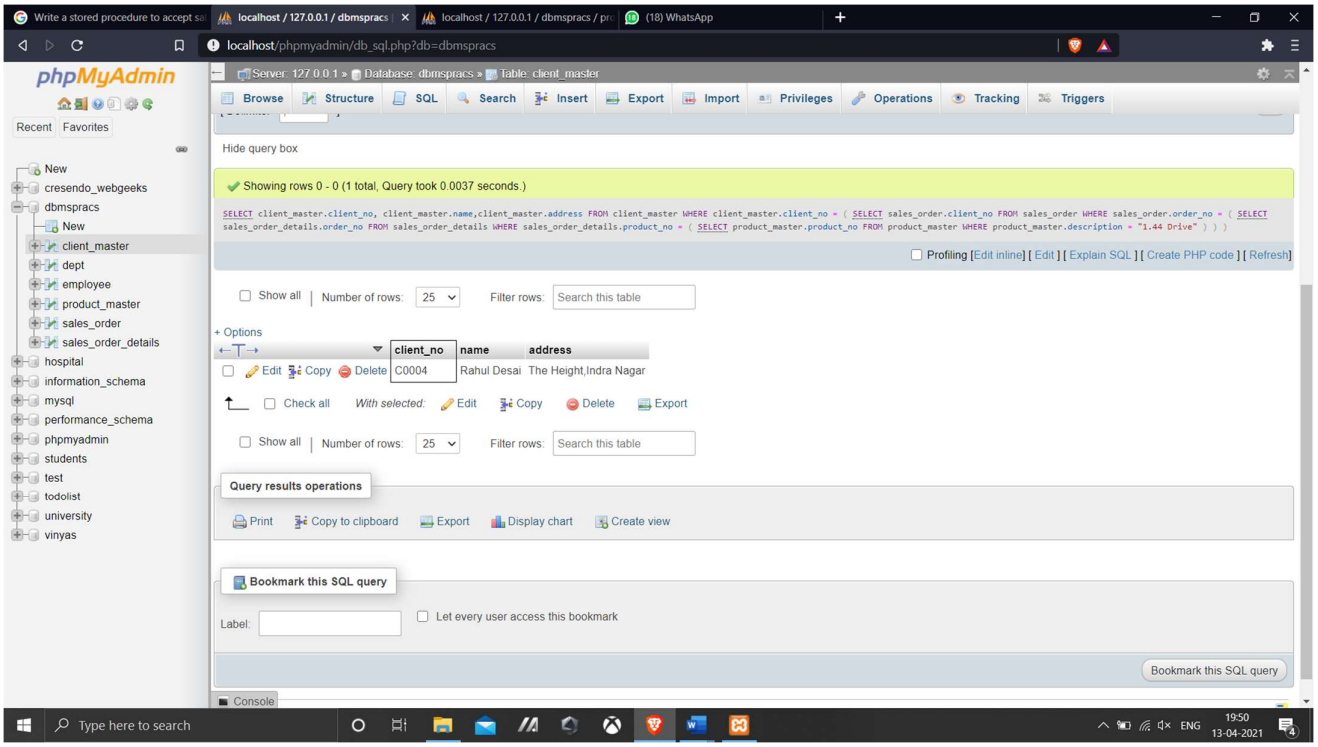
3. Find the clients names who have placed orders before the month of May’96

```
SELECT *
FROM client_master
WHERE client_master.client_no = (
SELECT sales_order.client_no
    FROM sales_order
    WHERE sales_order.order_date<"1996-05-01"
);
```



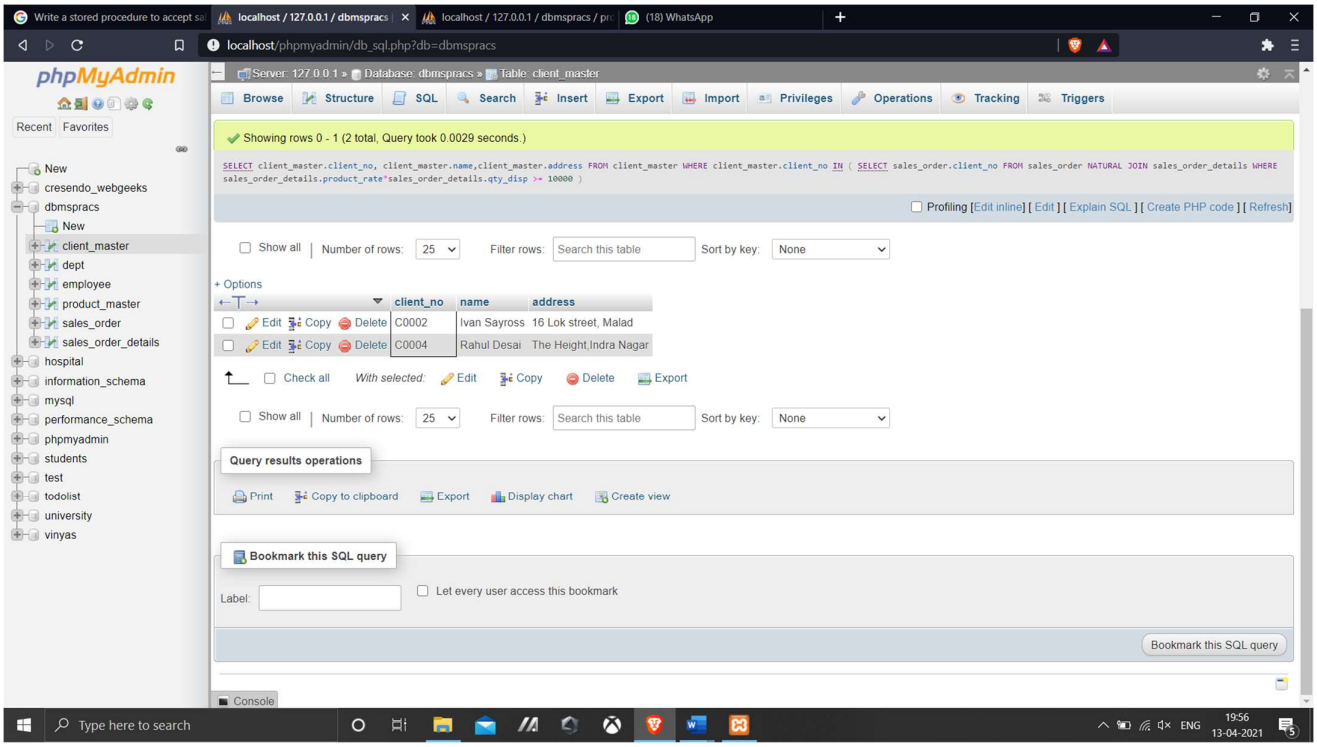
4. Find out if the product ‘1.44 Drive’ has been ordered by any client and print the client_no, name to whom it was sold

```
SELECT client_master.client_no, client_master.name,client_master.address
FROM client_master WHERE client_master.client_no = (
        SELECT sales_order.client_no FROM sales_order WHERE
sales_order.order_no = (
        SELECT sales_order_details.order_no FROM sales_order_details WHERE
sales_order_details.product_no = (
                SELECT product_master.product_no FROM product_master
WHERE product_master.description = "1.44 Drive"
        )
    )
);
```



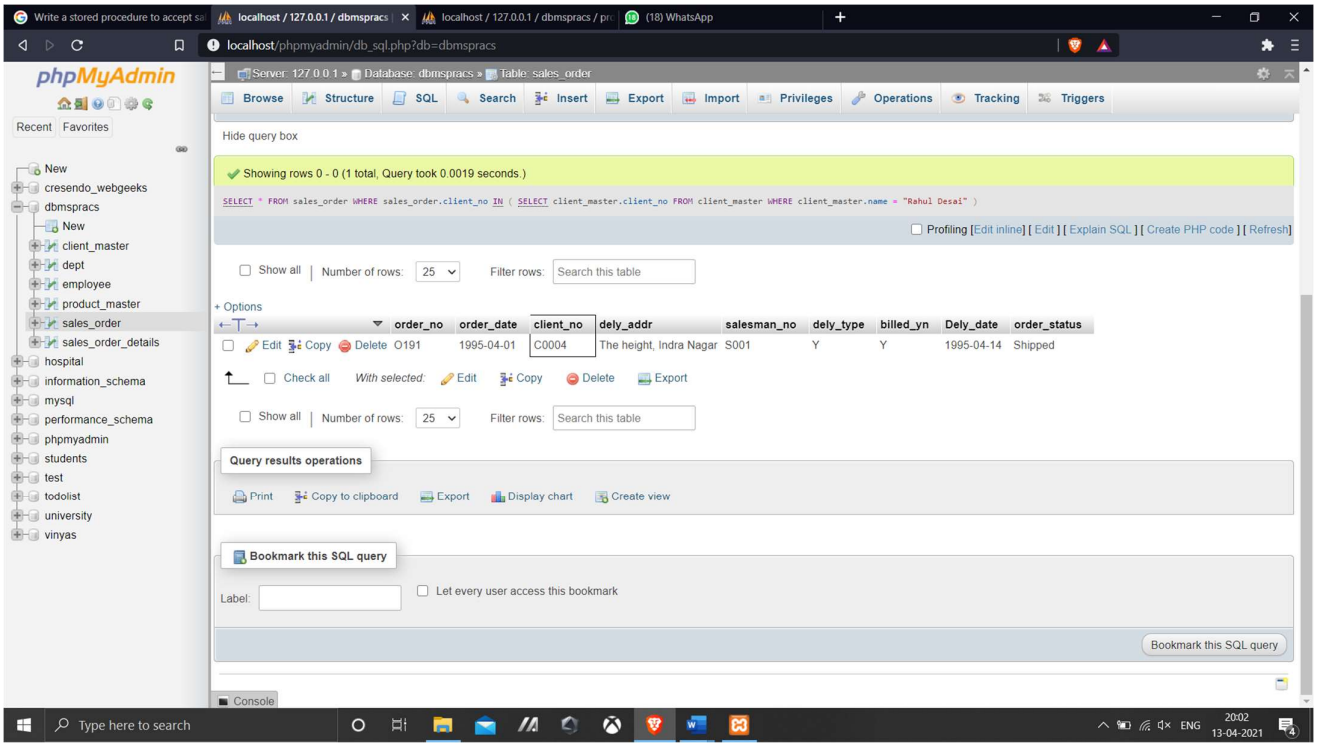
5. Find the names of clients who have placed orders worth Rs. 10000 or more

```
SELECT client_master.client_no, client_master.name,client_master.address
FROM client_master
WHERE client_master.client_no IN  (
        SELECT sales_order.client_no
    FROM sales_order NATURAL JOIN sales_order_details
    WHERE sales_order_details.product_rate*sales_order_details.qty_disp >=
10000
);
```



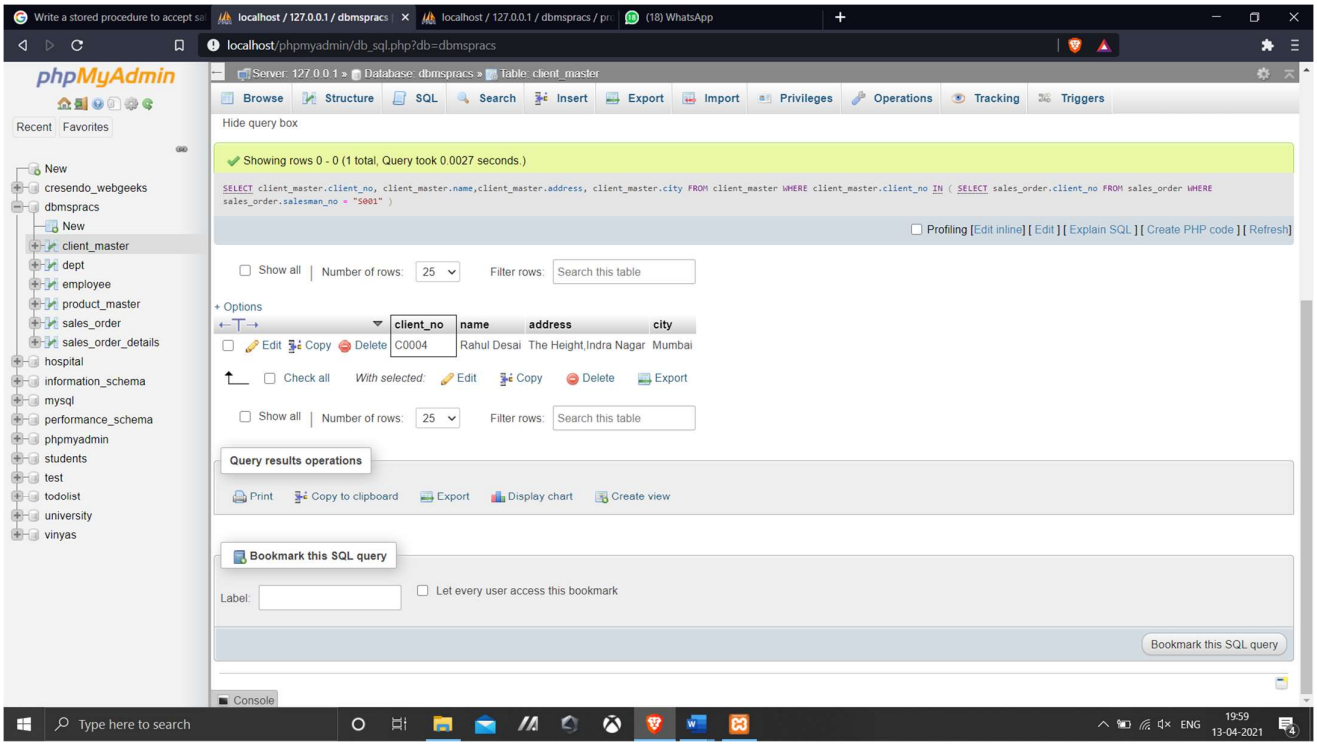
6. Retrieve all the orders placed by a client named ‘Rahul Desai’ from the sales_order table.

```
SELECT *
FROM sales_order
WHERE sales_order.client_no IN  (
        SELECT client_master.client_no
        FROM client_master
        WHERE client_master.name = "Rahul Desai"
);
```



7. Retrieve name, address, city of all the clients who have placed an order through salesman no ‘s001’.

```
SELECT client_master.client_no, client_master.name,client_master.address,
client_master.city
FROM client_master
WHERE client_master.client_no IN  (
        SELECT sales_order.client_no
    FROM sales_order
    WHERE sales_order.salesman_no = "S001"
);
```



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SE Comps

Exp-7 - Portlet

Q 1) What is Incremental Updates?

Ans

An incremental update adds new records to a project data set from Hive table

It performs a partial update of a project data set by selecting adding new and modified records. The data set should be a project data set.

The Incremental update operation fetches a subset of the records in the Source Hive table. The subset is determined by using a filtering predicate that specifies the Hive table columns that holds the records and value of the records to fetch. The records in the subset batch are ingested as follows:

- If a record is brand new (does not exist in the data set), it is added to the data set.

- If a record already exists in the data set but its content has been changed, it replaces the record in the data set.

(2) What is UPDATE Cascade & DELETE Cascade with suitable example?

Ans

DELETE Cascade:- When we create a foreign key using this option, it deletes the referencing rows in the child table when the referenced row is deleted in the parent table which has a primary key.

UPDATE Cascade:- When we create a foreign key using UPDATE CASCADE the referencing rows are updated in the child table when the referenced row is updated in the parent table which has a primary key.

Example -

Suppose that we have two tables:- buildings and rooms. In this database model, each buildings has one or many rooms. However each room belongs to one only building. A room would not exist without a building.

When you delete a row from the buildings table, you also want to delete all rows in the rooms table that references to the rows in the buildings table. For example, when we delete a row with building no. 1 in the building table, we also want the rows in the rooms table that refers to building no 2. will be also removed.

Syntax :-

```
CREATE TABLE rooms (
    room_no INT PRIMARY AUTO_INCREMENT,
    room_name VARCHAR(255) NOT NULL,
    building_no INT NOT NULL,

    FOREIGN KEY (building_no)
    REFERENCES buildings (building_no)
    ON DELETE CASCADE
);
```