

MNNIT ALLAHABAD

DBMS

SUBMITTED BY :

NAME : SHISHU

ROLL/REG ID : 2020CA089

SUBMIT DATE : 24/12/2021

SUBMITTED TO :

TEACHER _____

DEPPT : COMPUTER SCIENCE

DEADLINE: 24/12/2021

Q.1. A database is being constructed for storing sales information system. A product can be described with a unique product number, product name, selling price, manufacturer name. The product can sale to a particular client and each client have it own unique client number, client name, client addresses, city, pin code, state and total balance to be required to paid. Each client order is to buy product from the salesman. In the order, it has unique sales order number, sales order date, client number, salesman number (unique), billed whole payment by the party or not and its delivery date. The salesman have the name, addresses, city, pin code, state, salary of the sales man, delivery date, total quantity ordered, product rate.

The schema for the above is as below:-

Product(product_id, product_name, manufacturer_name, product_rate, sell_price, product_description)

```
CREATE TABLE product (p_id int primary key, product_name varchar(20), manufacturer_name varchar(20), product_rate double(5,2), sell_price double(5,2), prod_desc varchar(20))
```

Client(client_id, client_name, address, city, pin, state, balance_due)

```
CREATE TABLE client (client_id int primary key, client_name varchar(20), address varchar(25), city varchar(20), pin varchar(7), state varchar(20), balance_due double(5,2))
```

Salesman(salesman_id, salesman_name, address, city, pin, state, salary)

```
CREATE TABLE salesman (salesman_id int primary key, salesman_name varchar(20), address varchar(25), city varchar(20), pin varchar(7), state varchar(20), salary double(7,2))
```

Sales_order_details(sales_order_no, sales_order_date, client_id, salesman_id, bill_payby_party, delivery_date, product_rate, total_quantity_order, cancel_date)

```
CREATE TABLE sales_order_details (sales_order_no int primary key, sales_order_date date, client_id int references client(client_id), salesman_id int references salesman(salesman_id), bill_payby_party varchar(5), delivery_date date, product_rate double(5,2), total_quantity_order int, cancel_date date);
```

Write the SQL queries for the following with respect to database created:-

(a) Retrieve the list of names and the cities of all the clients.

```
SELECT client_name, city FROM client
```

client_name	city
Prakash Shaw	Aligarh
suman roy	agartala
priya das	kamalpur
mita mia	singur
moytree nayak	tezpur
pauri mia	tezpur
manali das	ayodhya
Neeraj Chopra	Chandigarh
kusum roy	tezpur

(b) List the various products available.

```
select * from product
```

p_id	product_name	manufacturer_name	product_rate	sell_price	prod_desc
1	lux_soap	Lux_international	15.670	20.430	soap
2	copy	times_copy_org	14.800	16.400	copy
3	marry_biscuit	marigold_org	2218.800	2220.400	buiskit
4	mitsubisi_pen	pen_international	2015.670	2120.800	pen
5	learn_books	book_world	5104.800	5116.400	book
6	tata_steel	tata_org	5118.800	5120.550	tata
7	seagate hdd	seaget_world	5104.274	5116.230	HDD1034
8	dvd writer	frontec_org	5118.250	5120.320	DVDRW

(c) Find the names of all clients having 'a' as the second letter in their names.

```
SELECT client_name FROM client WHERE client_name like '_a%'
```

client_name
pauri mia
manali das

(d) List all the clients who are located in Allahabad.

```
SELECT * FROM client WHERE city='allahabad'
```

client_id	client_name	address	city	pin	state	balance_due
1	Prakash Shaw	Sadar Bazaar	allahabad	254004	UP	250.20
5	moytree nayak	pachmile	allahabad	799152	UP	110.30
6	pauri mia	pachmile	allahabad	799152	UP	190.90


(e) Find the products whose selling price is greater than 2000 and less than or equal to 5000

```
SELECT * FROM product WHERE sell_price>2000 AND (sell_price<5000 OR sell_price=5000)
```

p_id	product_name	manufacturer_name	product_rate	sell_price	prod_desc
3	marry_biscuit	marigold_org	2218.800	2220.400	buiskit
4	mitsubisi_pen	pen_international	2015.670	2120.800	pen

(f) Add a new column NEW_PRICE into the produc table.

```
ALTER TABLE product add new_price double(7,2)
```

#	Name	Type
1	p_id 	int(11)
2	product_name	varchar(20)
3	manufacturer_name	varchar(20)
4	product_rate	double(8,3)
5	sell_price	double(8,3)
6	prod_desc	varchar(20)
7	new_price	double(7,2)

(g) Rename the column P_rate of Sales_Order_Details to new_P_rate.

```
ALTER table sales_order_details RENAME column product_rate TO new_product_rate;
```

(h) List the products in sorted order of their description.

```
SELECT * FROM `product` ORDER BY prod_desc
```

p_id	product_name	manufacturer_name	product_rate	sell_price	prod_desc ▲ 1	new_price
5	learn_books	book_world	5104.800	5116.400	book	NULL
3	marry_biscuit	marigold_org	2218.800	2220.400	buiskit	NULL
2	copy	times_copy_org	14.800	16.400	copy	NULL
8	dvd writer	frontec_org	5118.250	5120.320	DVDRW	NULL
7	seagate hdd	seaget_world	5104.274	5116.230	HDD1034	NULL
4	mitsubisi_pen	pen_international	2015.670	2120.800	pen	NULL
1	lux_soap	Lux_international	15.670	20.430	soap	NULL
6	tata_steel	tata_org	5118.800	5120.550	tata	NULL

(i) Display the order number and date on which the clients placed their order.

```
SELECT sales_order_no, sales_order_date FROM Sales_Order_Details
```

sales_order_no	sales_order_date
1	2021-08-12
2	2021-08-12
3	2021-08-12
4	2021-08-13
5	2021-08-14
6	2021-08-15
7	2021-01-16
8	2021-02-01

(j) Delete all the records having delivery date before 25th August, 2021.

```
DELETE FROM sales_order_details WHERE delivery_date < '2021-08-25'
```

✓ 3 rows affected. (Query took 0.1371 seconds.)

```
DELETE FROM sales_order_details WHERE delivery_date < '2021-08-25'
```

(k) Change the delivery date of order number 8 to 16-08-21

```
UPDATE sales_order_details SET delivery_date = '2021-08-16' WHERE sales_order_no = '8'
```

(l) Change the bal_due of client_no 3 to 1200

```
UPDATE client SET balance_due = '1200' WHERE client_id = '3'
```

(m) Find the product with description as 'HDD1034' and 'DVDRW'

```
SELECT * FROM product where prod_desc='HDD1034' OR prod_desc='DVDRW'
```

p_id	product_name	manufacturer_name	product_rate	sell_price	prod_desc	new_price
7	seagate hdd	seaget_world	5104.274	5116.230	HDD1034	NULL
8	dvd writer	frontec_org	5118.250	5120.320	DVDRW	NULL

(n) List the names, city and state of the clients not in the state of 'ASSAM'

```
SELECT client_name,city,state FROM client WHERE NOT state ='assam'
```

client_name	city	state
Prakash Shaw	allahabad	UP
suman roy	agartala	tripura
priya das	kamalpur	tripura
mita mia	singur	tripura
moytree nayak	allahabad	UP
pauri mia	allahabad	UP
manali das	ayodhya	UP
Neeraj Chopra	Chandigarh	Haryana

(o) List of all orders that were cancelled in the month of March.

Select * from sales_order_details where cancel_date LIKE '%-03-%'

sales_order_no	sales_order_date	client_id	salesman_id	bill_payby_party	delivery_date	product_rate	total_quantity_order	cancel_date
5	2021-08-14	2	2	no	2021-08-30	2220.40	52	2021-03-28
8	2021-02-01	4	3	no	2021-08-16	8220.40	54	2021-03-18