Skilling Experiment-6

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PRE-LAB

20CS2104S - DBMSSKILL WORKBOOK

EXPERIMENT 6
Implement SQL Queries on Case Study - SAINT GOBAIN

PRE-LAB:

How to use Auto Increment in SQL?

What is embedded and dynamic SQL?

What is meant by ALIAS in SQL?

While executing certain commands Mr.Jack is confused to decide whether View is a logicalstorage or physical storage. State him an appropriate solution with a valid reason?

How to build authentication to a database?

Which operator has the highest precedence among the following – AND, NOT, OR?

What is DEFAULT?

1. Auto-increment allows a unique number to be generated automatically when a new record is inserted into a table.

2. Aliases are the temporary names given to table or column for the purpose of a particular SQL query. Aliases are created to make table or column names more readable.

3. The default constraint is used to fill a column with a default and fixed value.

IN-LAB

1. Create tables with the required constraints for the given case study
2. Insert 10 records into the created tables

```
postgres=# select * from quotation;
 cust_id | cust_name | cust_phone | glass_type  | glass_thick | glass_measure | glass_color | address | exp_amt | advance_paid
---------+-----------+------------+-------------+-------------+---------------+-------------+---------+---------+--------------
       1 | Raju      | 8767895698 | Clear glass | 4MM         | 140CM         | Black       | Hyd     |   10000 |         2000
       2 | Hari      | 9999887766 | Mirror      | 5MM         | 150CM         | Blue        | Delhi   |   11000 |         2500
       3 | Arun      | 7567896546 | Clear glass | 6MM         | 120CM         | Black       | Mumbai  |    9000 |         1000
       4 | Kiran     | 6754567890 | Mirror      | 3MM         | 200CM         | Blue        | Hyd     |   20000 |         5000
       5 | Chand     | 7164567897 | Mirror      | 4MM         | 120CM         | Blue        | Hyd     |   15000 |         6000
(5 rows)
```

```
postgres=# select * from bill;
 bill_id | cust_name | cust_phone | address | glass_feature | mode_pay
---------+-----------+------------+---------+---------------+----------
     100 | Raju      | 8767895698 | Hyd     | Good          | Cash
     101 | Hari      | 9999887766 | Delhi   | Good          | Credit
     102 | Arun      | 7567896546 | Mumbai  | Good          | Cash
     103 | Kiran     | 6754567890 | Hyd     | Good          | Cash
     104 | Chand     | 7164567897 | Hyd     | Good          | Cash
(5 rows)
```

3. Write a SQL query to find out Customer ID and Customer Name inascending order

```
postgres=# select * from quotation order by cust_id ASC,cust_name ASC;
 cust_id | cust_name | cust_phone | glass_type  | glass_thick | glass_measure | glass_color | address | exp_amt | advance_paid
---------+-----------+------------+-------------+-------------+---------------+-------------+---------+---------+--------------
       1 | Raju      | 8767895698 | Clear glass | 4MM         | 140CM         | Black       | Hyd     |   10000 |         2000
       2 | Hari      | 9999887766 | Mirror      | 5MM         | 150CM         | Blue        | Delhi   |   11000 |         2500
       3 | Arun      | 7567896546 | Clear glass | 6MM         | 120CM         | Black       | Mumbai  |    9000 |         1000
       4 | Kiran     | 6754567890 | Mirror      | 3MM         | 200CM         | Blue        | Hyd     |   20000 |         5000
       5 | Chand     | 7164567897 | Mirror      | 4MM         | 120CM         | Blue        | Hyd     |   15000 |         6000
(5 rows)
```

4. Find unique Customer Name in Quotation table

```
postgres=# select distinct cust_name from quotation;
 cust_name
-----------
 Chand
 Hari
 Kiran
 Raju
 Arun
(5 rows)
```

5. SQL query to find the Glass Thickness where number ofCustomers of highest thickness

```
postgres=# select max(glass_thick) from quotation;
 max
-----
 6MM
(1 row)
```

6. Write a SQL query to list the name of those whose name starts with ‘A’ in quotation table

```
postgres=# select * from quotation where cust_name like 'A%';
 cust_id | cust_name | cust_phone | glass_type  | glass_thick | glass_measure | glass_color | address | exp_amt | advance_paid
---------+-----------+------------+-------------+-------------+---------------+-------------+---------+---------+--------------
       3 | Arun      | 7567896546 | Clear glass | 6MM         | 120CM         | Black       | Mumbai  |    9000 |         1000
(1 row)
```

7. Write a SQL query to list the Phone no. that ends with “910” in the bill table

```
postgres=# select * from bill where  cast(cust_phone as varchar) like '%910';
 bill_id | cust_name | cust_phone | address | glass_feature | mode_pay
---------+-----------+------------+---------+---------------+----------
(0 rows)
```

8. Write a SQL query to print details of the Customer whose name ends with “c”

```
postgres=# select * from bill where cust_name like '%c';
 bill_id | cust_name | cust_phone | address | glass_feature | mode_pay
---------+-----------+------------+---------+---------------+----------
(0 rows)
```

9. Write a SQL quey to print details of the customers whose advance paid lies between 1000 and 2000

```
postgres=# select * from quotation where advance_paid>1000 AND advance_paid<2000;
 cust_id | cust_name | cust_phone | glass_type | glass_thick | glass_measure | glass_color | address | exp_amt | advance_paid
---------+-----------+------------+------------+-------------+---------------+-------------+---------+---------+--------------
(0 rows)
```

10. Write an SQL query to fetch the list of customers with the same Mode of payment Query:

select distinct b.bill_id,b.cust_name,b.mode_pay from bill b,bill b1 where b.mode_pay=b1.mode_pay and b.bill_id!=b1.bill_id;

```
postgres=# select distinct b.bill_id,b.cust_name,b.mode_pay from bill b,bill b1 where b.mode_pay=b1.mode_pay and b.bill_id!=b1.bill_id;
 bill_id | cust_name | mode_pay
---------+-----------+----------
     104 | Chand     | Cash
     100 | Raju      | Cash
     102 | Arun      | Cash
     103 | Kiran     | Cash
(4 rows)
```

11. Write an SQL query to fetch unique records in quotation and bill table

```
postgres=# select distinct * from quotation;
 cust_id | cust_name | cust_phone | glass_type  | glass_thick | glass_measure | glass_color | address | exp_amt | advance_paid
---------+-----------+------------+-------------+-------------+---------------+-------------+---------+---------+--------------
       5 | Chand     | 7164567897 | Mirror      | 4MM         | 120CM         | Blue        | Hyd     |   15000 |         6000
       3 | Arun      | 7567896546 | Clear glass | 6MM         | 120CM         | Black       | Mumbai  |    9000 |         1000
       2 | Hari      | 9999887766 | Mirror      | 5MM         | 150CM         | Blue        | Delhi   |   11000 |         2500
       4 | Kiran     | 6754567890 | Mirror      | 3MM         | 200CM         | Blue        | Hyd     |   20000 |         5000
       1 | Raju      | 8767895698 | Clear glass | 4MM         | 140CM         | Black       | Hyd     |   10000 |         2000
(5 rows)
```

```
postgres=# select distinct * from bill;
 bill_id | cust_name | cust_phone | address | glass_feature | mode_pay
---------+-----------+------------+---------+---------------+----------
     101 | Hari      | 9999887766 | Delhi   | Good          | Credit
     104 | Chand     | 7164567897 | Hyd     | Good          | Cash
     102 | Arun      | 7567896546 | Mumbai  | Good          | Cash
     100 | Raju      | 8767895698 | Hyd     | Good          | Cash
     103 | Kiran     | 6754567890 | Hyd     | Good          | Cash
(5 rows)
```

POST-LAB

1.show the total population of the world.

A.select sum(population) from Asia;

```
practice=# select sum(population) from Asia;
   sum
----------
 86119250
(1 row)
```

2. For each continent show the continent and number of countries with populations of atleast 10 million.

Aselect continent,count(name) from Asia group by continent ;

```
                                                                  ^
practice=# select continent,count(name) from Asia group by continent ;
 continent | count
-----------+-------
 Africa    |     2
 Asia      |     1
 Europe    |     2
(3 rows)
```

3.Display the continents in the world

A. select continent from Asia;

```
practice=# select continent from Asia;
 continent
-----------
 Asia
 Europe
 Africa
 Europe
 Africa
(5 rows)
```