SQL SELECT RANDOM

RANDOM() in SQL is generally used to return a random row from a table present in the database. It has many applications in real life.

For example:

- 1. There are a lot of employees in an organization. Suppose, if the event manager wants to mail any ten random employees then he/she can use the RANDOM() in SQL to get the Email Id of the ten random employees.
- 2. It can also be used to display random questions during an online exam or MCQ from a pool of questions.

In this article, we are going to discuss how RANDOM() can be used using a sample table shown below.

Sample Input Table

Customer Information

Customer ID	Customer Name	E-Mail Address
1	Srishti	abc@gmail.com
2	Rajdeep	def@gmail.com
3	Aman	xxx@gmail.com
4	Pooja	xyz@gmail.com

BASIC SQL QUERY

1. Creating a Database

```
CREATE DATABASE database_name;
```

2. Creating a Table

```
CREATE TABLE Table_name(
col_1 TYPE col_1_constraint,
col_2 TYPE col_2 constraint
.....
)

col: Column name
colTYPE: Data type whether an integer, variable character,
etc
col col_constraint: Constraints in SQL like PRIMARY KEY,
NOT NULL, UNIQUE, REFERENCES, etc
```

3. Inserting into a Table

```
INSERT INTO Table_name
VALUES(val_1, val_2, val_3, ....)
val: Values in particular column
```

4. View The Table

Output

Que	ery Editor Quer	Editor Query History			
1 SELECT * FROM customer_information 2					
Dat	Data Output Explain Messages Notifications				
	customer_id [PK] integer	customer_name character varying (50)	email_address character varying (20)		
1	1	Srishti	abc@gmail.com		
2	2	Rajdeep	def@gmail.com		
3	3	Aman	xxx@gmail.com		
4	4	Pooja	xyz@gmail.com		

Customer Table

SQL QUERY FOR RANDOM

1. MYSQL

```
SELECT col_1,col_2, ... FROM Table_Name
ORDER BY RAND()
```

```
col_1: Column 1
col_2: Column 2
```

The above query will return the entire table for the specific columns mentioned and the rows will be random and changing position every time we run the query. To get a single row randomly, we can use the <u>LIMIT Clause</u> and set to only one row. <u>ORDER BY</u> clause in the query is used to order the row(s) randomly.

```
SELECT col_1,col_2, ... FROM Table_Name
ORDER BY RAND()
LIMIT 1

col_1: Column 1
col_2: Column 2
```

2. PostgreSQL and SQLite

It is exactly the same as MYSQL. Just replace RAND() with RANDOM().

```
SELECT col_1,col_2, ... FROM Table_Name
ORDER BY RAND()
LIMIT 1

col_1: Column 1
col_2: Column 2
```

Output

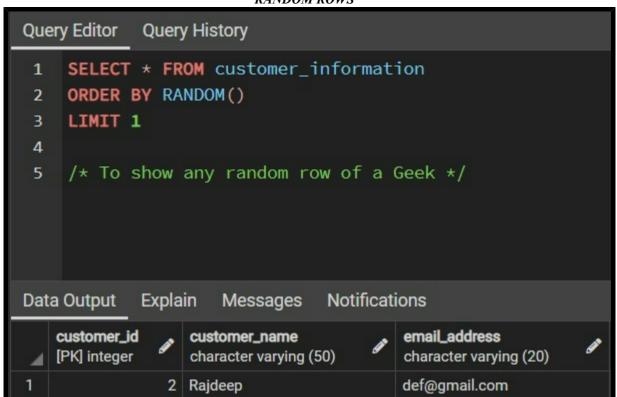
Query Editor Query History SELECT * FROM customer_information 1 2 ORDER BY RANDOM() /* The rows now changed randomly. 4 5 Geek Rajdeep with ID=2 moved to last */ Messages Notifications Data Output Explain customer_id email_address customer_name [PK] integer character varying (20) character varying (50) abc@gmail.com 1 1 Srishti xxx@gmail.com 2 3 Aman xyz@gmail.com 3 4 Pooja 2 Rajdeep def@gmail.com

Random Rows

Query Editor Query History					
1 2 3	SELECT * FROM customer_information ORDER BY RANDOM()				
4	/* The rows now changed randomly.				
5 Geek Rajdeep with ID=2 moved to first */					
Data Output Explain Messages Notifications					
4	customer_id [PK] integer	customer_name character varying (50)	email_address character varying (20)		
1	2	Rajdeep	def@gmail.com		
2	3	Aman	xxx@gmail.com		
3	1	Srishti	abc@gmail.com		
4	4	Pooja	xyz@gmail.com		

```
Query Editor
             Query History
    SELECT customer_id,customer_name FROM customer_information
    ORDER BY RANDOM()
 3
    /* The rows now changed randomly.
    Geek Aman with ID=3 moved to first */
             Explain
                                 Notifications
Data Output
                     Messages
   customer_id
                  customer_name
                  character varying (50)
   [PK] integer
               3 Aman
1
2
               2 Rajdeep
3
               1 Srishti
               4 Pooja
```

RANDOM ROWS



RANDOM ROW

```
Query Editor Query History
     SELECT * FROM customer_information
     ORDER BY RANDOM()
 2
     LIMIT 1
 3
 4
 5
     /* To show any random row of a Geek */
                                   Notifications
Data Output
             Explain
                       Messages
    customer_id
                                             email_address
                   customer_name
   [PK] integer
                                             character varying (20)
                   character varying (50)
1
                   Srishti
                                             abc@gmail.com
```

RANDOM ROW

We can observe that the above queries return the rows randomly from all the set of rows in the table. The RANDOM() clause is beneficial when there are humongous records in the database.