In [1]:
```
import pandas as pd
import mysql.connector
```

In [2]:
```
import psycopg2
from sqlalchemy import create_engine
```

In [4]:
```
order_df=pd.read_csv("C://Users//amrut//Downloads//archive(7)//orders.csv").sa
products_df=pd.read_csv("C://Users//amrut//Downloads//archive(7)//products.csv
```

In [5]:
```
order_df.head()
```

Out[5]:

	order_id	user_id	eval_set	order_number	order_dow	order_hour_of_d
1376811	2146113	82740	prior	9	4	
248061	2574049	15000	prior	29	4	
3306194	2104750	199262	prior	1	4	
858463	2790199	51576	prior	38	3	
3046379	644620	183798	prior	6	1	

In [6]:
```
aisles_df=pd.read_csv("C://Users//amrut//Downloads//archive(7)//aisles.csv")
departments_df=pd.read_csv("C://Users//amrut//Downloads//archive(7)//departmer
order_products__prior_df=pd.read_csv("C://Users//amrut//Downloads//archive(7)//
```

In [7]:
```
products_df.head()
```

Out[7]:

	product_id	product_name	aisle_id	department_id
0	1	Chocolate Sandwich Cookies	61	19
1	2	All-Seasons Salt	104	13
2	3	Robust Golden Unsweetened Oolong Tea	94	7
3	4	Smart Ones Classic Favorites Mini Rigatoni Wit...	38	1
4	5	Green Chile Anytime Sauce	5	13

In [8]:
```
departments_df.head()
```

Out[8]:

	department_id	department
0	1	frozen
1	2	other
2	3	bakery
3	4	produce
4	5	alcohol

In [9]:
```
order_products__prior_df.head()
```

Out[9]:

	order_id	product_id	add_to_cart_order	reordered
13032074	1375524	30406	13	0
11354591	1198729	30960	17	0
4028460	425072	48057	1	1
25182691	2655974	16185	13	1
6523151	688486	43227	2	0

In [69]:
```
try:
    conn = mysql.connector.connect(
    host='localhost',
    user="root",
    password="root",
    database="ecommerce_data_analysis"
    )
except:
    print("connection is unsuccessful")
```

In [70]:
```
cursor = conn.cursor()
```

In [71]:
```
engine = create_engine("mysql+mysqlconnector://root:root@localhost:3306/ecomme
```

In [18]:
```
cursor.execute( """
create database ecommerce_data_analysis;
"""
)
```

In [19]:
```
cursor.execute( """
use ecommerce_data_analysis;
"""
)
```

In [20]:
```
cursor.execute( """
create table departments(
deparment_id varchar(20),
department  text(100)
);
"""
)
```

In [21]:
```
cursor.execute( """
create table aisles(
  aisle_id varchar(20) primary key,
  aisle text(100)
);
"""
```

```
)
```

In [22]:
```
cursor.execute( """
create table products(
  product_id varchar(20) primary key,
  product_name text(200),
  aisle_id varchar(20),
  department_id varchar(20),
FOREIGN KEY (aisle_id) REFERENCES aisles(aisle_id)
);
"""
)
```

In [23]:
```
cursor.execute( """
create table order_product(
  order_id varchar(20) primary key,
  product_id varchar(20),
  add_to_cart_order varchar(20),
  reordered varchar(20),
FOREIGN KEY (product_id) REFERENCES products(aisle_id)
);
"""
)
```

In [24]:
```
cursor.execute( """
create table orders(
   order_id varchar(20),
   user_id varchar(20) primary key,
   order_number varchar(20),
   Order_dow varchar(20),
   days_since_prior_order varchar(20),
   Order_hour_of_day varchar(20),
FOREIGN KEY (order_id) REFERENCES order_product(order_id)
);
"""
)
```

In [25]:
```
order_df.drop('eval_set',inplace=True ,axis=1)
```

In [26]:
```
aisles_df.to_sql('aisles',con=engine,if_exists='append',index=False)
```

Out[26]: -1

In [27]:
```
departments_df.to_sql('department',con=engine,if_exists='replace',index=False)
```

Out[27]: -1

In [29]:
```
order_df.to_sql('orders',con=engine,if_exists='replace',index=False)
```

Out[29]: -1

In [31]:
```
products_df.to_sql('products',con=engine,if_exists='append',index=False)
```

Out[31]: -1

In [36]:
```
order_products__prior_df.to_sql('order_products',con=engine,if_exists='replace
```

Out[36]: -1

In [33]:
```
order_df.to_sql('orders',con=engine,if_exists='append',index=False)
```

Out[33]: -1

In [73]:
```
cursor.execute("""

create temporary  table order_info as
select
products.product_id, products.product_name,products.aisle_id,products.departme
orders.order_id,orders.order_number,orders.order_dow,
order_products.add_to_cart_order,order_products.reordered
from
(( orders join order_products on orders.order_id = order_products.order_id)
 join products on products.product_id = order_products.product_id);
""" )
```

In [64]:
```
cursor.execute("""
 create temporary table product_info as
 select
 product_id, product_name,count(*) as total_orders, sum(reordered) as total_re
 from order_info
 group by product_id,product_name ;""")
```

In [74]:
```
cursor.execute("""
 create temporary table department_product_inf as
 select
 count(*) as total_products, count(distinct product_id) as unquie_products,
 count( case when order_dow <6 then 1 else NULL END) as weekdays_purchased
 ,count( case when order_dow >=6 then 1 else NULL END) as weekwnd_purchased, a
 from order_info
 group by department_id;""")
```

In [75]:
```
cursor.execute("""
create temporary table aisle_info as
select
aisle_id as aisle , count(*) as total_purchased, count( distinct product_id) a
from order_info
group by aisle_id
order by count(*) desc
limit 10;""")
```

In [ ]:
```

```