#### Code

**Creating database:** CREATE DATABASE project;

Using the database: USE project;

# Creating users table:

CREATE TABLE users ( UserID VARCHAR(50), SignupDate DATE, UserSegment VARCHAR(20));

# Creating visitors table:

CREATE TABLE visitors (webClientID VARCHAR(50), VisitDateTime DATE, ProductID VARCHAR(50), UserID VARCHAR(50), Activity VARCHAR(30), Browser VARCHAR(50), OS VARCHAR(50), City VARCHAR(255), Country VARCHAR(255));

#### **Loading Data:**

Mysql: SET GLOBAL local\_infile=1

command prompt: mysql --local-infile=1 -u root -p

Mysql: load data local infile "<path\_to\_file>" into table visitor columns terminated by ","

ignore 1 lines;

# No\_Of\_Products\_Viewed\_15\_Days

create table no\_of\_products\_viewed select users.UserID,count(distinct visitors.ProductID)
No\_Of\_Products\_Viewed\_15\_Days from users left join visitors on users.UserID=visitors.UserID
AND visitors.VisitDateTime >= "2018-05-28" – INTERVAL 15 day group by users.UserID
order by users.UserID limit 10;

#### No\_of\_days\_Visited\_7\_Days

create table no\_of\_days\_visited select users.UserID ,count(distinct visitors.VisitDateTime) No\_of\_days\_Visited\_7\_Days from users left join visitors on users.UserID=visitors.UserID AND visitors.VisitDateTime >= "2018-05-28" - INTERVAL 7 day group by users.UserID order by users.UserID limit 10;

# User\_Vintage

create table user\_vintage select UserID,DATEDIFF("2018-05-28", SignupDate) User\_Vintage from users order by UserID limit 10;

# Pageloads\_last\_7\_days

create table pageloads select users.UserID,count(visitors.Activity)
Pageloads\_last\_7\_days from users left join visitors on users.UserID=visitors.UserID
AND visitors.VisitDateTime >= "2018-05-28" - INTERVAL 7 day AND
lower(activity)="pageload" group by users.UserID order by users.UserID limit 10;

# Clicks\_last\_7\_days

create table clicks select users.UserID,count(visitors.Activity) Clicks\_last\_7\_days from users left join visitors on users.UserID=visitors.UserID AND visitors.VisitDateTime >= "2018-05-28" - INTERVAL 7 day AND lower(activity)="click" group by users.UserID order by users.UserID limit 10;

### Most\_Active\_OS

create table most\_active\_os with grouped as (select UserID, OS, count(\*) as count\_of\_OS from visitors group by UserID, OS), final as (select UserID, OS, count\_of\_OS, ROW\_NUMBER() OVER(PARTITION BY UserID ORDER BY count\_of\_OS DESC) AS Row\_N from grouped) select UserID, OS as Most\_Active\_OS, count\_of\_OS from final where Row\_N = 1;

# Most\_Viewed\_product\_15\_Days

create table asd select a.UserID,max(a.ProductID) as Most\_Viewed\_product\_15,count(a.Activity) over(partition by a.UserID,a.ProductID) as cnt,row\_number() over(partition by a.UserID order by a. VisitDateTime DESC) rnk from visitors a join users b on a.UserID=b.UserID where a. VisitDateTime>=2018-05-13 and lower(a.Activity)='pageload' and a.ProductID !='' group by a.UserID,a.ProductID,a. VisitDateTime ORDER BY a.UserID ASC;

CREATE TABLE most\_viewed\_product select UserID, Most\_Viewed\_product\_15 ,row\_number() over(partition by UserID order by cnt desc) as adhoc from asd where rnk=1;

create table most\_viewed\_product\_15\_days select users.userID,most\_viewed\_product.Most\_Viewed\_product\_15,if(most\_viewed\_product.Most\_Viewed\_product\_15 is NULL,"Product101",most\_viewed\_product.Most\_Viewed\_product\_15)

Most\_Viewed\_product\_15\_Days from users left join most\_viewed\_product on users.UserID=most\_viewed\_product.UserID order by users.userID limit 10;

# Recently\_Viewed\_Product

create table abc select a.UserID,max(a.ProductID) as Recently\_Viewed,row\_number() over(partition by a.UserID order by a.VisitDateTime DESC) rnk from visitors a join users b on a.UserID=b.UserID where a. VisitDateTime>=2018-05-13 and lower(a.Activity)='pageload' and a.ProductID !=' ' and a.VisitDateTime is not null group by a.UserID,a.ProductID,a.VisitDateTime ORDER BY a.UserID ASC;

create table recently\_viewed select \* from abc where rnk=1;

create table recently\_viewed\_product select users.userID, recently\_viewed.

Recently\_Viewed,if(recently\_viewed. Recently\_Viewed is NULL or recently\_viewed.Recently\_Viewed = ","Product101", recently\_viewed. Recently\_Viewed) Recently\_Viewed\_Product from users left join recently\_viewed on users.UserID= recently\_viewed.UserID order by\_users.userID limit 30;

# Input Feature table:

create table input\_feature select

users.UserID,no\_of\_days\_visited.No\_of\_days\_Visited\_7\_Days,no\_of\_products\_viewed.No\_Of\_Products \_Viewed\_15\_Days,user\_vintage.User\_Vintage,most\_viewed\_product\_15\_days.Most\_Viewed\_product\_ 15\_Days,

# **MySQL Export Table to CSV**

Select @ @global.secure\_file\_priv;

**SELECT** 'UserID', 'No\_of\_days\_Visited\_7\_Days', 'No\_Of\_Products\_Viewed\_15\_Days', 'User\_Vintage', 'Most\_Viewed\_product\_15\_Days', 'Most\_Active\_OS', 'Recently\_Viewed\_Product', 'Pageloads\_last\_7\_days', 'Clicks\_last\_7\_days'

**UNION** ALL

**SELECT** UserID, No\_of\_days\_Visited\_7\_Days, No\_Of\_Products\_Viewed\_15\_Days, User\_Vintage, Most\_Viewed\_product\_15\_Days, Most\_Active\_OS, Recently\_Viewed\_Product, Pageloads\_last\_7\_days, Clicks\_last\_7\_days

**FROM** input\_feature

**INTO** OUTFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/input\_feature.csv' fields terminated by "," lines terminated by "\n";