**Part I - SQL Test**

1. What’s the total sales amount for each month among customers who are older than 18?

SELECT

year(order\_datetime) as year,

month(order\_datetime) as month,

SUM(amount) as total\_sale

FROM

Orders as od

INNER JOIN

Customer as cu

ON

Od. customer\_id = cu. customer\_id

WHERE

cu.age>18

GROUP BY

year(order\_datetime),

month(order\_datetime),

ORDER BY

year(order\_datetime),

month(order\_datetime),

1. Show the most popular category in terms of sales quantity for each country and each gender in 2020.

SELECT

item\_ID,

quantity,

category

FROM

Customer as cu

INNER JOIN

Orders as od

ON

cu. customer\_id = od. customer\_id

INNER JOIN

Items as it

ON

it.item\_id = cu.item\_id

GROUP BY

cu.country,

cu.gender

HAVING

year(cu.order\_datetime) = 2020

AND

MAX(cu.quantity)

1. List the customer\_id and their second order\_id of customers who placed more than 10 orders in the last 7 days.

SELECT

customer\_id,

order\_id

order\_datetime

FROM

Order

WHERE

Order. order\_datetime > (SELECT GETDATE())-7,

order\_id NOT IN ( SELECT order\_datetime FROM Order WHERE Order. order\_datetime > (SELECT GETDATE())-7 AND MIN(order\_datetime) )

HAVING

COUNT(DISTINCT order\_id > 10)