3.6.1.

select to\_char (eventtime, 'Month-dd') as day,

count (distinct dash\_id) as "DAU"

from sessions

where eventtime <= current\_date - interval '3 month'

and eventtime < current\_date

and tester IS false

and cheater IS false

group by 1

order by 1 asc

3.6.2.

select to\_char(eventtime, 'yyyy-mm') as month

, count(distinct dash\_id) as "MAU"

from sessions

where eventtime>=current\_date - interval '3 month'

and eventtime < current\_date

and tester is false

and cheater is false

group by 1

order by 1 asc;

3.6.3.

select to\_char(date\_trunc('week', eventtime), 'YYYY Mon dd')

, count(distinct dash\_id) as "WAU"

from sessions

where eventtime >= date\_trunc('week',current\_date) - interval '10 week'

and eventtime < date\_trunc('week',current\_date)

and (eventtime-created) > interval '7 day'

and tester is false

and cheater is false

group by 1

order by 1 asc;

3.6.4.

select to\_char(eventtime, 'YYYY-mm-dd') as day

, sum(priceusd) as "Gross"

, count(dash\_id) as "Transactions"

,count(distinct dash\_id) as "Paying users"

,avg(priceusd) as "Average check"

,sum(priceusd)/count(distinct dash\_id)) as "ARPPU"

from payments

where eventtime >= current\_date - interval '1 month'

and eventtime < current\_date

and tester is false

and cheater is false

group by 1

order by 1 asc;

3.6.5.

select country

, count(distinct dash\_id) as "Paying users"

, sum(priceusd)/(dash\_id) as "ARPPU"

from payments

where eventtime>=current\_date - interval '1 month'

and eventtime < current\_date

and tester is false

and cheater is false

group by 2

order by 2 asc

group by country

order by "Paying users"

limit 5;

3.6.6.

CREATE TABLE user\_actions(

user\_id serial PRIMARY KEY,

action VARCHAR(100),

order\_id INT,

time timestamp

)

3.6.7.

CREATE TABLE cd\_members(

mem\_id INT PRIMARY KEY,

surname VARCHAR(200),

firstname VARCHAR(200),

address VARCHAR(300),

zipcode INT,

telephone VARCHAR(20),

recommendedby INT,

joindate timestamp

)

create table cd\_bookings(

fac\_id INT PRIMARY KEY,

mem\_id INT,

start\_time timestamp,

slots INT

)

create table cd\_facilities(

fac\_id INT,

name VARCHAR(100),

membercost DECIMAL(8,2),

guestcost DECIMAL(8,2),

initial\_outlay DECIMAL(8,2),

monthlymaintanance DECIMAL(8,2)

)

insert into cd\_members(mem\_id, surname, firstname, address, zipcode, telephone, recommendedby, joindate)

VALUES(1, 'Bons', 'Billy', 'PiastraHouse, Treasure Island, England', 21751, '+7-XXX-222-22-22', 6, '01-09-2023'), (2, 'Smollett', 'Captain Alexander', '2, "John Benbow", Bristol, England', 21751, '+7-XXX-888-88-88', 1, '26-10-2023'), (3, 'Levesey', 'Dr.David', '1, "John Benbow", Bristol, England', 21751, '+7-XXX-555-55-55', 2, '16-09-2023'), (4, 'Hawking', 'James', 'StaffRoom, "John Benbow", Bristol, England', 21751, '+7-XXX-777-77-77', 2, '06-10-2023'), (5, 'Trelawney', 'Squire John', '3 appartment, "John Benbow", Bristol, England', 21751, '+7-XXX-444-44-44', 4, '29-10-2023'), (6, 'Silver', 'John', 'PiastraHouse, Treasure Island, England', 21751, '+7-XXX-333-33-33', 2, '15-10-2023');

INSERT INTO cd\_facilities(fac\_id, name, membercost, guestcost, initial\_outlay, monthlymaintanance)

VALUES(1, 'tennis cort', 10, 20, 1000, 100), (2, 'poker table', 50, 100, 1000, 100), (3, 'Fishing Boat', 200, 300, 500, 50), (4, 'Yacht Rental', 2000, 5000, 15000, 2000);

insert into cd\_bookings(fac\_id, mem\_id, start\_time, slots)

VALUES(2, 1, '01-09-2023 16:00', 4), (2, 1, '02-09-2023 16:00', 4), (2, 1, '03-09-2023 16:00', 4), (1, 3, '16-09-2023 09:00', 2), (1, 3, '23-09-2023 09:00', 2), (1, 3, '30-09-2023 09:00', 2),(1, 3, '07-10-2023 09:00', 2), (1, 3, '14-10-2023 09:00', 2), (1, 3, '21-10-2023 09:00', 2), (4, 6, '15-10-2023 11:00', 10);