Queries

remove error with grouping by non aggregated terms:

SET sql\_mode=(SELECT REPLACE(@@sql\_mode,'ONLY\_FULL\_GROUP\_BY',''));

6. Get details of all the facilities in the system. Details include facility’s name, address, city, province, postal-code, phone number, web address, type, capacity, general manager’s name and number of employees currently working for the facility. Results should be displayed sorted in ascending order by province, then by city, then by type, then by number of employees currently working for the facility.

s

**#Add new employees who are general managers of a facility. Each facility must have a GM.**

INSERT INTO employee\_address VALUES (15, "15 employee add", "montreal", "province1", "h2k 5h1"), (16, "16 employee add", "montreal", "province2", "h2y 3n1"),

(17, "17 employee add", "toronto", "province4", "m2k 5s2"),(18, "18 employee add", "toronto", "province4", "M1M 3M1"),

(19, "19 employee add", "montreal", "province1", "H6K 5P2"), (20, "20 employee add", "montreal", "province1", "H6T 1X3"),(21, "21 employee add", "toronto", "province4", "M5M 9M1");

INSERT INTO employee VALUES (45, 15, "emp", "fifteen", "2005-01-02", 127551879, "emp.fifteen@email.com", "canadian"),

(46, 16, "emp", "sixteen", "1999-01-02", 987551879, "emp.sixteen@email.com", "canadian"),

(47, 17, "emp", "seventeen", "2000-05-01", 127556243, "emp.seventeen@email.com", "canadian"),

(48, 18, "emp", "eighteen", "1987-02-07", 127254379, "emp.eighteen@email.com", "canadian"),

(49, 19, "emp", "nineteen", "2003-01-02", 187541879, "emp.nineteen@email.com", "canadian"),

(50, 20, "emp", "twenty", "2001-11-02", 879861879, "emp.twenty@email.com", "canadian"),

(51, 21, "emp", "twentyone", "1999-07-12", 129981879, "emp.twentyone@email.com", "canadian");

INSERT INTO work (employee\_medicare\_number, role\_id, facility\_id, start\_date, end\_date)

VALUES (45, 1, 4,'2019-11-01', '2024-01-01'), (46, 1, 5,'2019-11-01', '2024-01-01'), (47, 1, 6,'2019-11-01', '2024-01-01'),

(48, 1, 7,'2019-11-01', '2024-01-01'), (49, 1, 8,'2019-11-01', '2024-01-01'), (50, 1, 9,'2019-11-01', '2024-01-01'),

(51, 1, 10,'2019-11-01', '2024-01-01');

SELECT facility.name as "Facility Name", facility\_address.facility\_address as "Facility Address", facility\_address.city as "City",  
facility\_address.postal\_code as "Postal Code", facility\_address.province as "Province", facility.phone\_number as "Phone Number",  
facility.website\_url as "Web Address", facility\_type.name as "Type", facility.capacity as "Capacity", employee.first\_name as "GM F-Name",  
employee.last\_name as "GM LName", COUNT(\*) as "# Employees Working"  
FROM facility, facility\_address, facility\_type, employee, role, work  
WHERE facility\_type.facility\_type\_id = facility.facility\_type\_id AND  
role.role\_id = 1 AND facility.facility\_id = facility\_type.facility\_type\_id AND  
facility.facility\_address\_id = facility\_address.facility\_address\_id AND  
work.employee\_medicare\_number = employee.medicare\_number AND  
work.facility\_id = facility\_type.facility\_type\_id  
GROUP BY work.facility\_id  
ORDER BY province ASC, city ASC, facility.facility\_type\_id ASC, COUNT(\*) ASC;

Graphical user interface, text, application

Description automatically generated

7. Get details of all the employees currently working in a specific facility. Details include employee’s first-name, last-name, start date of work, date of birth, Medicare card number, telephone-number, address, city, province, postal-code, citizenship, and email address. Results should be displayed sorted in ascending order by role, then by first name, then by last name.

**#add citizenship column to employee**

ALTER TABLE employee

ADD citizenship varchar(50);

**#add citizenship values**

UPDATE employee

SET citizenship = 'canadian'

WHERE medicare\_number <= 40; #set them to Canadian

SELECT employee.first\_name as "First Name", employee.last\_name as "Last Name", work.start\_date as "Start Date", employee.date\_of\_birth as "DOB",  
employee.medicare\_number as "Medicare Number", employee.phone\_number as "Phone Number", employee\_address.employee\_address as "Address",  
employee\_address.city as "city", employee\_address.postal\_code as "Postal Code", employee.citizenship as "Citizen", employee.email as "Email",  
facility.name as "Facility"  
FROM employee, employee\_address, work, facility  
WHERE employee.medicare\_number = work.employee\_medicare\_number AND work.facility\_id = facility.facility\_id  
AND employee\_address.employee\_address\_id = employee.employee\_address\_id  
AND facility.name = "Johns Hospital" **#remove this line to get details for all facilities**  
GROUP BY work.facility\_id, work.work\_id   
ORDER BY work.role\_id ASC, employee.first\_name ASC, employee.last\_name ASC;

Graphical user interface

Description automatically generated

8.

For a given employee, get the details of all the schedules she/he has been scheduled during a specific period of time. Details include facility name, day of the year, start time and end time. Results should be displayed sorted in ascending order by facility name, then by day of the year, the by start time

**#add 4 schedules for employee 1 to work at facility ID 1 (John hospital).**

INSERT INTO schedule VALUES (1,1, 31, "2022-05-05", "9:00:00", "17:00:00"), (2,1, 31, "2022-05-06", "9:00:00", "17:00:00"), (3,1, 31, "2022-05-07", "9:00:00", "17:00:00"), (4,1, 31, "2022-05-08", "9:00:00", "17:00:00")

SELECT employee.first\_name as "Employee First Name", employee.last\_name as "Employee Last Name", facility.name as "Facility Name",   
schedule.sch\_date as "Sch. Date", schedule.start\_time as "Start Time",  
schedule.end\_time as "End Time"  
FROM facility, schedule, employee  
WHERE schedule.emp\_id = employee.medicare\_number AND schedule.emp\_id = 31 AND facility.facility\_id = schedule.fac\_id  
ORDER BY facility.name ASC, schedule.sch\_date ASC, schedule.start\_time ASC;Graphical user interface, text, application, table

Description automatically generated

9.

Get details of all the doctors who have been infected by COVID-19 in the past two weeks. Details include doctor’s first-name, last-name, date of infection, and the name of the facility that the doctor is currently working for. Results should be displayed sorted in ascending order by the facility name, then by the first-name of the doctor.

**Added some additional data**:

UPDATE contracted

SET date = '2023-04-05'

WHERE employee\_id = 40; #changed employee contracted covid to 2 weeks ago.

INSERT INTO employee\_address VALUES (11, "11 employee add", "montreal", "province3", "YHJ HFH");

INSERT INTO employee VALUES (41, 11, "emp", "eleven", "2000-05-05", 123555879, "emp.eleven@email.com", "canadian");

INSERT INTO contracted (employee\_id, disease\_id, date) VALUES (40,1,"2020-01-19");

INSERT INTO work (employee\_medicare\_number, role\_id, facility\_id, start\_date, end\_date)

VALUES (41, 5, 2,'2019-01-01', '2023-01-01');

INSERT INTO employee\_address VALUES (12, "12 employee add", "montreal", "province4", "JDK HFH");

INSERT INTO employee VALUES (42, 12, "emp", "twelve", "2005-07-03", 127845879, "emp.twelve@email.com", "canadian");

INSERT INTO contracted (employee\_id, disease\_id, date) VALUES (42,1,"2021-11-19");

INSERT INTO work (employee\_medicare\_number, role\_id, facility\_id, start\_date, end\_date)

VALUES (42, 5, 1,'2019-11-01', '2024-01-01');

#DROP Trigger GM\_check in case you can’t add to contracted table.

SELECT DISTINCT employee.first\_name as "First Name", employee.last\_name as "Last Name", contracted.date as "Date of Infection",  
facility.name as "Facility Name", disease.name as "Disease", role.name as "Role"  
FROM employee, contracted, work, facility, role, disease  
WHERE role.role\_id = 5 AND employee.medicare\_number = work.employee\_medicare\_number AND contracted.disease\_id = 1  
AND work.employee\_medicare\_number = employee\_medicare\_number AND  
contracted.employee\_id = employee.medicare\_number AND work.facility\_id = facility.facility\_id   
AND disease.disease\_id = contracted.disease\_id AND contracted.date between '2023-03-26' and '2023-04-10'  
ORDER BY facility.name ASC, employee.first\_name ASC;

Graphical user interface, application

Description automatically generated

10.

List the emails generated by a given facility. The results should be displayed in ascending order by the date of the emails.

select date, sender AS 'Facility', subject, body from email where sender=1 order by sender asc, date asc ;

-- sender is facility\_id, sender 0 is when no schdeule for the next week(ignore for this query)

-- above query gives results byu facility 1, if all facilities are needed replace sender=1 to sender<>0

-- other condition will be meet

11. For a given facility, generate a list of all the doctors and nurses who have been on schedule to work in the last two weeks. The list should include first-name, last-name, and role. Results should be displayed in ascending order by role, then by first name.

#changed schedule date for an employee to last 2 weeks for the sake of this query.

UPDATE schedule

SET sch\_date = '2023-04-01'

WHERE schedule\_id = 4;

#add a doctor to a recent schedule (last 2 weeks)

INSERT INTO schedule VALUES

(7, 1, 35, "2023-04-02", "9:00:00", "17:00:00")

#employee 13 (nurse)

INSERT INTO employee\_address VALUES (13, "13 employee add", "quebec city", "province2", "h1h 1h1");

INSERT INTO employee VALUES (43, 13, "emp", "thirteen", "1987-06-05", 123555451, "emp.thirteen@email.com", "french");

INSERT INTO work (employee\_medicare\_number, role\_id, facility\_id, start\_date, end\_date)

VALUES (43, 6, 1,'2020-01-01', '2025-01-01');

INSERT INTO schedule VALUES

(5, 1, 43, "2023-03-24", "9:00:00", "17:00:00")

#employee 14(nurse)

INSERT INTO employee\_address VALUES (14, "14 employee add", "toronto", "province4", "m1m 1m1");

INSERT INTO employee VALUES (44, 14, "emp", "fourteen", "1990-05-02", 123479451, "emp.fourteen@email.com", "canadian");

INSERT INTO work (employee\_medicare\_number, role\_id, facility\_id, start\_date, end\_date)

VALUES (44, 6, 4,'2020-01-01', '2025-01-01');

INSERT INTO schedule VALUES

(6, 4, 44, "2023-03-24", "9:00:00", "17:00:00")

SELECT DISTINCT employee.first\_name as "First Name", employee.last\_name as "Last Name", role.name as "Profession",

schedule.sch\_date as "Scheduled Date"

FROM employee

JOIN schedule

JOIN role

JOIN work

JOIN facility

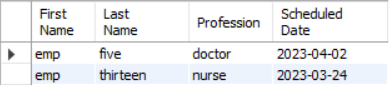
ON schedule.sch\_date between '2023-03-20' and '2023-04-20' AND schedule.emp\_id = employee.medicare\_number

AND work.role\_id = role.role\_id AND work.employee\_medicare\_number = employee\_medicare\_number

AND schedule.emp\_id = work.employee\_medicare\_number AND (work.role\_id = 5 OR work.role\_id = 6)

AND facility.name = "Johns Hospital" AND facility.facility\_id = schedule.fac\_id **#Remove this line for all facilities**

ORDER BY role.name ASC, employee.first\_name ASC;



12. For a given facility, give the total hours scheduled for every role during a specific period. Results should be displayed in ascending order by role.

**#changed schedule date for an employee to last 2 weeks for the sake of this query.**

UPDATE schedule

SET sch\_date = '2023-04-02'

WHERE schedule\_id = 3;

SELECT role.name as "role", schedule.emp\_id as "Employee ID" ,facility.name as "facility",

SUM((schedule.end\_time - schedule.start\_time) / 10000) as "Total Hours"

FROM schedule, facility, role, work

WHERE facility.facility\_id = 1 AND facility.facility\_id = schedule.fac\_id AND role.role\_id = work.role\_id

AND work.employee\_medicare\_number = schedule.emp\_id AND schedule.sch\_date between '2023-03-20' and '2023-04-20' **#1 Month period**

GROUP BY role.name

ORDER BY role.name ASC;

Graphical user interface, text, application

Description automatically generated

13.

For every facility, provide the province where the facility is located, the facility name, the capacity of the facility, and the total number of employees in the facility who have been infected by COVID-19 in the past two weeks. The results should be displayed in ascending order by province, then by the total number of employees infected.

SELECT facility\_address.province as "province", facility.name as "name", facility.capacity as "capacity",

COUNT(work.employee\_medicare\_number) as "Employees Contracted Covid-19"

FROM facility\_address, facility, work, contracted

WHERE facility\_address.facility\_address\_id = facility.facility\_address\_id AND work.facility\_id = facility.facility\_id

AND work.facility\_id = facility\_address.facility\_address\_id AND contracted.employee\_id = work.employee\_medicare\_number

AND contracted.disease\_id = 1 AND contracted.date BETWEEN '2023-03-26' and '2023-04-10' #COVID-19 disease ID is 1

GROUP BY work.facility\_id;

Table

Description automatically generated

14.

For every doctor who is currently working in the province of “Québec”, provide the doctor’s first-name, last-name, the city of residence of the doctor, and the total number of facilities the doctor is currently working for. Results should be displayed in ascending order by city, then in descending order by total number of facilities.

-- province 1 is quebec

select emp.first\_name, emp.last\_name, ea.city, (select count(\*) from work where employee\_medicare\_number= emp.medicare\_number) as 'Facilities\_working' from employee emp

join employee\_address ea on emp.employee\_address\_id= ea.employee\_address\_id

join work wk on emp.medicare\_number= wk.employee\_medicare\_number and wk.role\_id=5 and wk.end\_date is null

join facility\_address fa on wk.facility\_id = fa.facility\_address\_id and fa.facility\_address\_id=1

order by ea.city asc, Facilities\_working desc;

15.

select emp.medicare\_number,emp.first\_name,emp.last\_name,emp.date\_of\_birth,emp.email, sc.fac\_id,

sum(sc.end\_time-sc.start\_time) / 10000 'total\_time\_scheduled\_in\_hrs',

(select sch\_date from schedule where emp\_id=1 and fac\_id=1 order by sch\_date asc limit 1) as 'first\_day\_as nurse'

from employee emp

join work wk on emp.medicare\_number= wk.employee\_medicare\_number and (role\_id=6) and wk.end\_date is null

left join schedule sc on emp.medicare\_number = sc.emp\_id and wk.facility\_id= sc.fac\_id

group by emp.medicare\_number,emp.first\_name, emp.last\_name, emp.date\_of\_birth, emp.email, sc.fac\_id order by total\_time\_scheduled\_in\_hrs desc limit 1

16.

select distinct emp.first\_name, emp.last\_name, emp.medicare\_number, emp.phone\_number, emp.email,

wk.role\_id as 'Role',emp.date\_of\_birth, sum(sc.end\_time-sc.start\_time) / 10000 'total\_time\_scheduled\_in\_hrs'

from employee emp

join work wk on emp.medicare\_number= wk.employee\_medicare\_number and (role\_id=5 or role\_id=6)

left join schedule sc on emp.medicare\_number = sc.emp\_id and wk.facility\_id= sc.fac\_id

left join contracted ct on emp.medicare\_number = ct.employee\_id and ct.disease\_id=1

where wk.end\_date is null and

((select count(\*) from contracted where employee\_id = emp.medicare\_number and contracted.disease\_id=1) >=3 )

GROUP BY emp.first\_name, emp.last\_name, emp.medicare\_number, wk.role\_id, emp.phone\_number, emp.email, emp.date\_of\_birth

order by wk.role\_id asc, emp.first\_name asc, emp.last\_name asc;

17.

select emp.first\_name, emp.last\_name, emp.medicare\_number, emp.phone\_number, emp.email,

sum(sc.end\_time-sc.start\_time) / 10000 'total\_time\_scheduled\_in\_hrs'

from employee emp

join work wk on emp.medicare\_number= wk.employee\_medicare\_number and (role\_id=5 or role\_id=6)

left join schedule sc on emp.medicare\_number = sc.emp\_id and wk.facility\_id= sc.fac\_id

left join contracted ct on emp.medicare\_number = ct.employee\_id and ct.disease\_id<>1

where wk.end\_date is null and

((select count(\*) from contracted where employee\_id = emp.medicare\_number and contracted.disease\_id=1) =0

or (ct.employee\_id is null) )

group by emp.first\_name, emp.last\_name, emp.medicare\_number, emp.phone\_number, emp.email, wk.role\_id

order by wk.role\_id , emp.first\_name asc, emp.last\_name asc;