

Faculty of Engineering and Computer Science Expectations of Originality

This form has been created to ensure that all students in the Faculty of Engineering and Computer Science comply with principles of academic integrity prior to submitting coursework to their instructors for evaluation: namely reports, assignments, lab reports, and/or software. All students should become familiar with the University's Code of Conduct (Academic) located at http://web2.concordia.ca/Legal_Counsel/policies/english/AC/Code.html

Please read the back of this document carefully before completing the section below. This form must be attached to the front of all coursework submitted to instructors in the Faculty of Engineering and Computer Science.

Course Number: _____ **COMP-353** _____ **Instructor:** Khaled Jababo




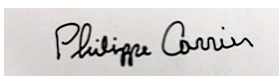
Type of Submission (Please check off responses to both a & b)

a. ☒ Report ___ Assignment ___ Lab Report ___ Software

b. ___ Individual submission ☒ Group Submission (All members of the team must sign below)

Having read both sides of this form, I certify that I/we have conformed to the Faculty's expectations of originality and standards of academic integrity.

By GROUP **bnc353_2**

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EXPECTATIONS OF ORIGINALITY & STANDARDS OF ACADEMIC INTEGRITY

ALL SUBMISSIONS must meet the following requirements:

1. The decision on whether a submission is a group or individual submission is determined by the instructor. Individual submissions are done alone and should not be identical to the submission made by any other student. In the case of group submissions, all individuals in the group must be listed on and must sign this form prior to its submission to the instructor.
2. All individual and group submissions constitute original work by the individual(s) signing this form.
3. Direct quotations make up a very small proportion of the text, i.e., not exceeding 5% of the word count.
4. Material paraphrased from a source (e.g., print sources, multimedia sources, web-based sources, course notes or personal interviews) has been identified by a numerical reference citation.
5. All of the sources consulted and/or included in the report have been listed in the Reference section of the document.
6. All drawings, diagrams, photos, maps or other visual items derived from other sources have been identified by numerical reference citations in the caption.
7. No part of the document has been submitted for any other course.
8. Any exception to these requirements are indicated on an attached page for the

instructor's review **REPORTS and ASSIGNMENTS must also meet the following**

additional requirements:

1. A report or assignment consists entirely of ideas, observations, information and conclusions composed by the student(s), except for statements contained within quotation marks and attributed to the best of the student's/students' knowledge to their proper source in footnotes or references.
2. An assignment may not use solutions to assignments of other past or present students/instructors of this course or of any other course.
3. The document has not been revised or edited by another student who is not an author.
4. For reports, the guidelines found in Form and Style, by Patrick MacDonagh and Jack Borden (Fourth Edition: May 2000, available at <http://www.encs.concordia.ca/scs/Forms/Form&Style.pdf>) have been used for this submission.

LAB REPORTS must also meet the following requirements:

1. The data in a lab report represents the results of the experimental work by the student(s), derived only from the experiment itself. There are no additions or modifications derived from any outside source.
2. In preparing and completing the attached lab report, the labs of other past or present students of this course or any other course have not been consulted, used, copied, paraphrased or relied upon in any manner whatsoever.

SOFTWARE must also meet the following requirements:

1. The software represents independent work of the student(s).
2. No other past or present student work (in this course or any other course) has been used in writing this software, except as explicitly documented.
3. The software consists entirely of code written by the undersigned, except for the use of functions and libraries in the public domain, all of which have been documented on an attached page.
4. No part of the software has been used in previous submissions except as identified in the documentation.
5. The documentation of the software includes a reference to any component that the student(s) did not write.
6. All of the sources consulted while writing this code are listed in the documentation.

Warm Up Project

A Report
Presented to
The Department of Computer Science
and Software Engineering

Concordia University

In Partial Fulfillment
of the Requirements
Of COMP 353

By
bnc353_2

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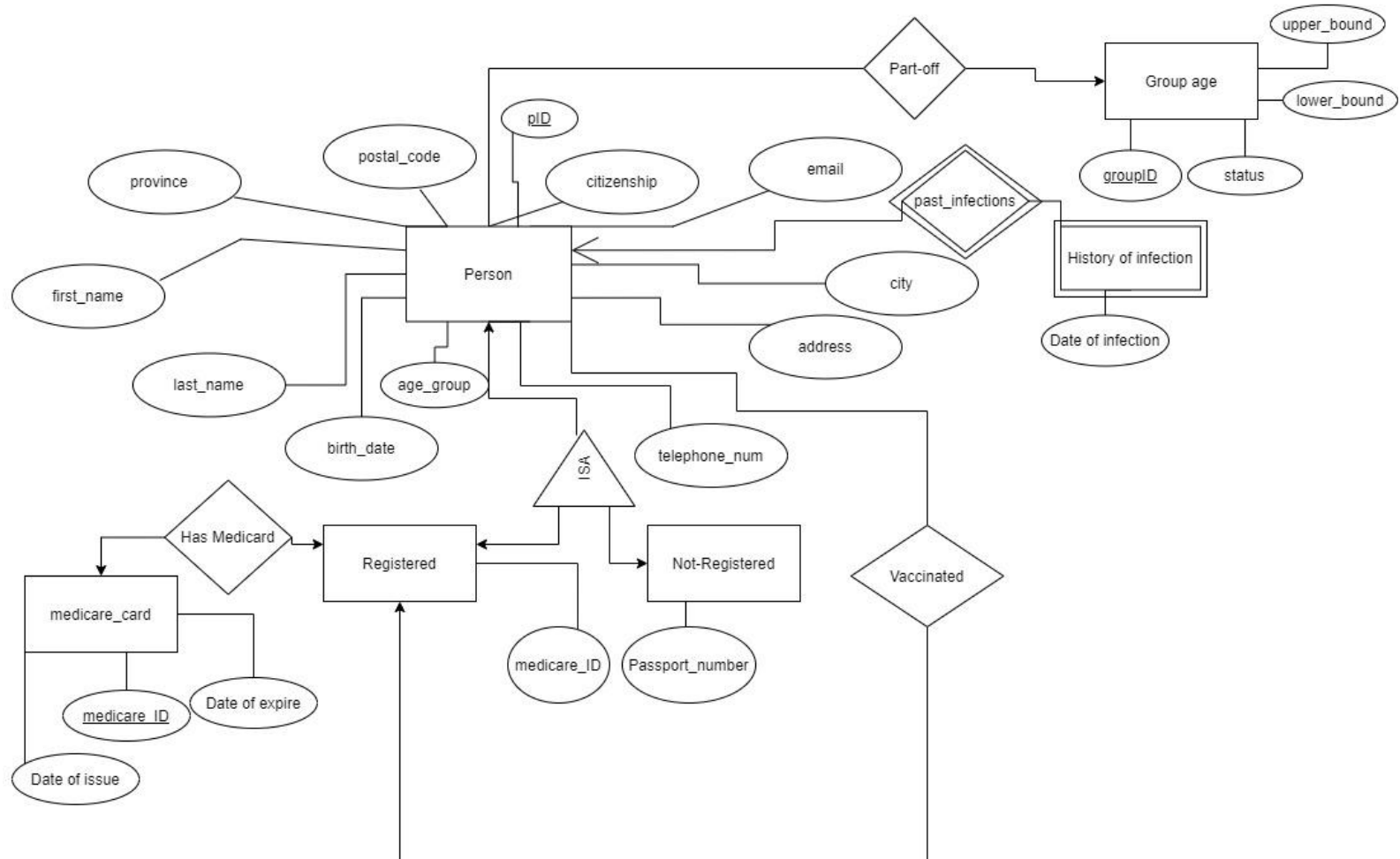
Concordia University
October 12, 2021

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1. Design

COVID-19 Population Vaccination System (C19PVS)



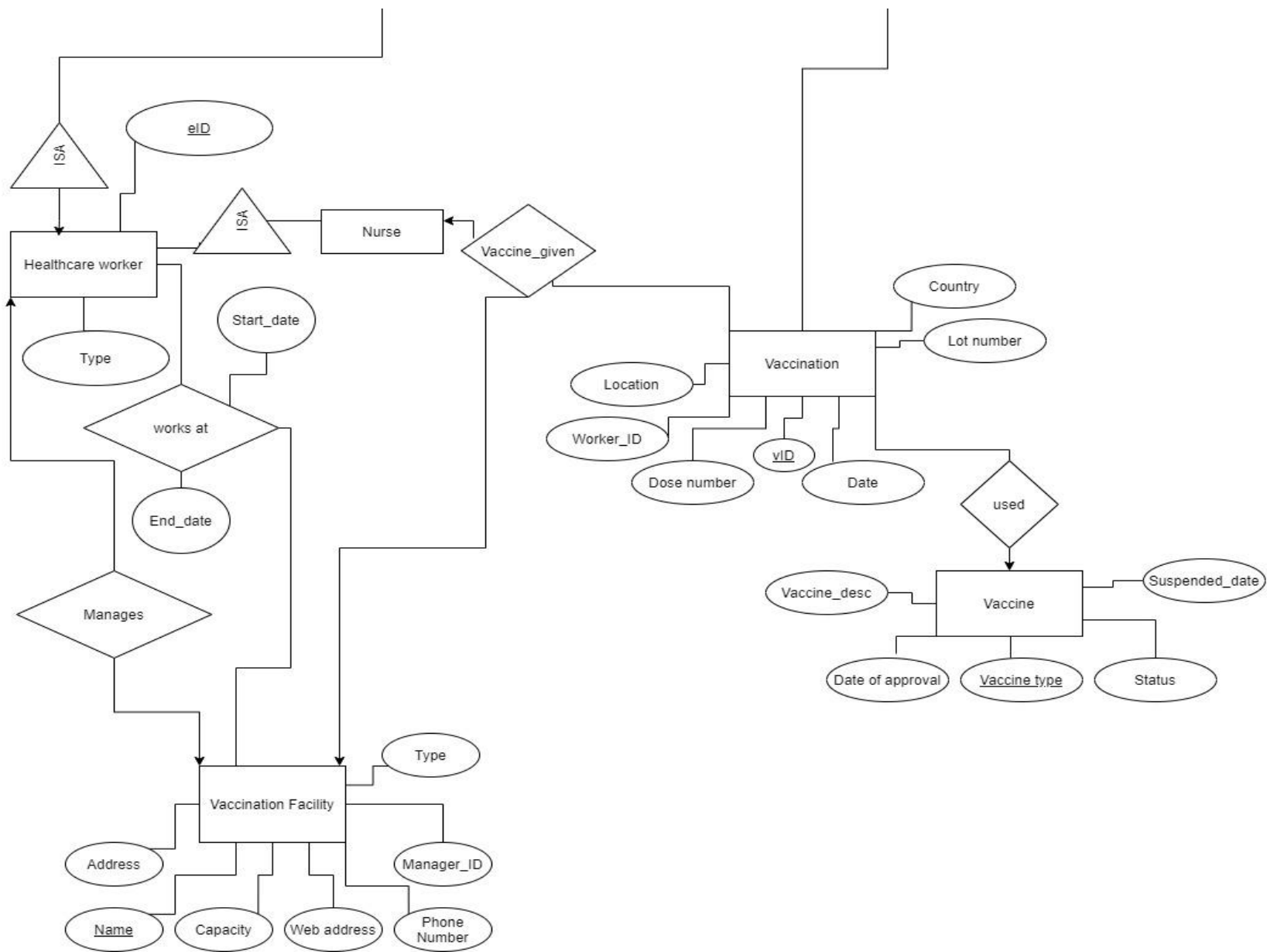


Figure 1: ER Diagram of C19PVS (Landscape)

COVID-19 Population Vaccination System (C19PVS)

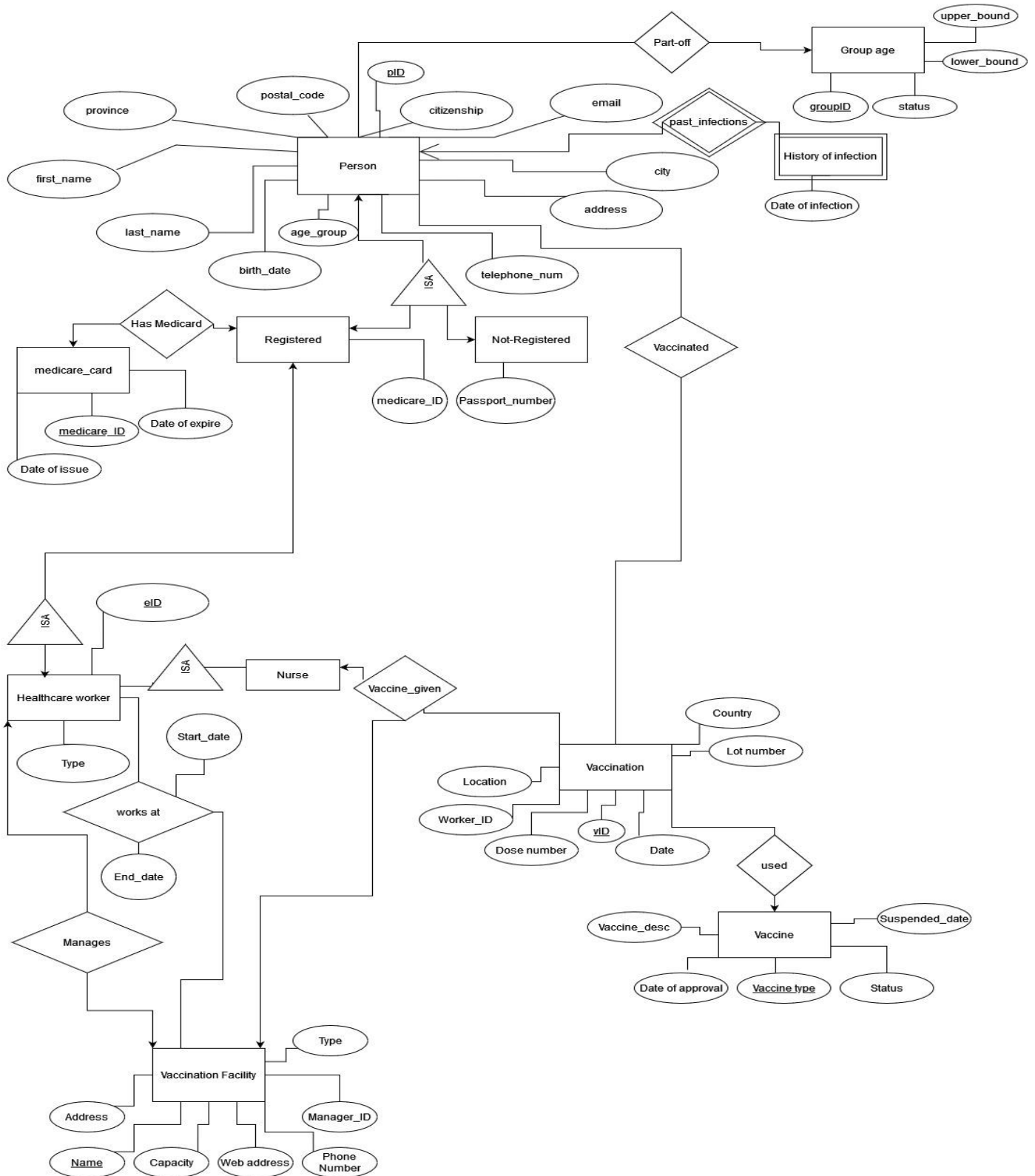


Figure 2: ER Diagram of C19PVS (portrait)

2. SQL Database Creation

2.1 Person

```
CREATE TABLE IF NOT EXISTS Person(  
  pID          INT          NOT NULL      AUTO_INCREMENT,  
  firstName    VARCHAR(100)  NOT NULL,  
  lastName     VARCHAR(100)  NOT NULL,  
  dob          Date          NOT NULL,  
  telNum       VARCHAR(14)   NOT NULL,  
  address      VARCHAR(100)  NOT NULL,  
  city         VARCHAR(100)  NOT NULL,  
  province     ENUM('AB', 'BC', 'MB', 'NB', 'NL', 'NT', 'NS', 'NU', 'ON',  
                    'PE', 'QC', 'SK', 'YT') NOT NULL,  
  postalCode   VARCHAR(6)    NOT NULL,  
  citizenship  VARCHAR(100)  NOT NULL,  
  email        VARCHAR(100)  NOT NULL,  
  ageGroup     INT           NULL,  
  PRIMARY KEY (pID),  
  FOREIGN KEY (ageGroup) REFERENCES groupAge (groupID)  
    ON DELETE SET NULL ON UPDATE CASCADE  
);
```

2.2 Registered-Person

```
CREATE TABLE IF NOT EXISTS Registered(  
  pID          INT NOT NULL,  
  medicareID   INT,  
  PRIMARY KEY (medicareID),  
  FOREIGN KEY (pID) REFERENCES Person(pID)  
    ON DELETE CASCADE ON UPDATE CASCADE,  
  FOREIGN KEY (medicareID) REFERENCES MedicareCard(medicardID)  
    ON DELETE CASCADE ON UPDATE CASCADE  
);
```


2.3 Unregistered-Person

```
CREATE TABLE IF NOT EXISTS NotRegistered (  
  pID          INT          NOT NULL,  
  passNum      VARCHAR(255),  
  PRIMARY KEY (passNum),  
  FOREIGN KEY (pID) REFERENCES Person(pID)  
    ON DELETE CASCADE ON UPDATE CASCADE  
);
```

2.4 Public Health Worker

```
CREATE TABLE IF NOT EXISTS PublicHealthWorker(  
  eID          INT,  
  pID          INT  NOT NULL,  
  medicardID   INT  NOT NULL,  
  type         ENUM('nurse', 'secretary', 'manager', 'security', 'employee')  
    NOT NULL,  
  PRIMARY KEY (eID),  
  FOREIGN KEY (pID) REFERENCES Person(pID)  
    ON DELETE CASCADE ON UPDATE CASCADE  
);
```

2.5 Medicare_Card

```
CREATE TABLE IF NOT EXISTS MedicareCard(  
  medicardID   INT,  
  doissue      DATE NOT NULL,  
  doexpire     DATE NOT NULL,  
  PRIMARY KEY (medicardID)  
);
```

2.6 Vaccination

```
CREATE TABLE IF NOT EXISTS Vaccination (  
  vID          INT          NOT NULL      AUTO_INCREMENT,  
  pID          INT          NOT NULL,  
  location     VARCHAR(100) NOT NULL,  
  eID          INT          NULL,  
  type         VARCHAR(50)  NOT NULL,  
  country      CHAR(3)      NOT NULL      DEFAULT 'CAN',  
  lotNum       INT          NOT NULL,  
  doseNumber   INT          NOT NULL,  
  date         DATE         NOT NULL,  
  PRIMARY KEY (vID),  
  FOREIGN KEY (pID) REFERENCES Person(pID)  
    ON DELETE CASCADE ON UPDATE CASCADE,  
  FOREIGN KEY (eID) REFERENCES PublicHealthWorker(eID)  
    ON DELETE SET NULL ON UPDATE CASCADE,  
  FOREIGN KEY (type) REFERENCES Vaccine(name)  
    ON DELETE RESTRICT ON UPDATE CASCADE  
);
```

2.7 Vaccination_Facility

```
CREATE TABLE IF NOT EXISTS Facility (  
  name         VARCHAR(100),  
  address      MEDIUMTEXT NOT NULL,  
  city         VARCHAR(100) NOT NULL,  
  province     ENUM('AB', 'BC', 'MB', 'NB', 'NL', 'NT', 'NS', 'NU', 'ON',  
    'PE', 'QC', 'SK', 'YT') NOT NULL,  
  postalCode   VARCHAR(6)  NOT NULL,  
  phone        VARCHAR(14)  NOT NULL,  
  web          VARCHAR(100) NOT NULL,  
  type         ENUM('hospital', 'clinic', 'special') NOT NULL,  
  capacity     INT          NOT NULL,  
  managerID    INT          NULL,  
  PRIMARY KEY (name),  
  FOREIGN KEY (managerID) REFERENCES PublicHealthWorker(eID)  
    ON DELETE SET NULL ON UPDATE CASCADE  
);
```

2.8 Works_At

```
CREATE TABLE IF NOT EXISTS WorksAt (  
  eID          INT          NOT NULL,  
  facilityName VARCHAR(50)   NOT NULL,  
  startDate    DATE         NOT NULL,  
  endDate      DATE         NOT NULL,  
  FOREIGN KEY (eID) REFERENCES PublicHealthWorker(eID)  
    ON DELETE CASCADE ON UPDATE CASCADE,  
  FOREIGN KEY (facilityName ) REFERENCES Facility(name)  
    ON DELETE CASCADE ON UPDATE CASCADE,  
  PRIMARY KEY (eID, facilityName)  
);
```

2.9 Approved_Vaccines

```
CREATE TABLE IF NOT EXISTS Vaccine (  
  name          VARCHAR(50),  
  status        ENUM('SAFE', 'SUSPENDED') NOT NULL,  
  approvalDate  DATE         NOT NULL,  
  suspendedDate DATE         NULL,  
  description    MEDIUMTEXT NOT NULL,  
  PRIMARY KEY (name)  
);
```

2.10 Group_Age

```
CREATE TABLE IF NOT EXISTS GroupAge (  
  groupID      INT          NOT NULL,  
  status       BOOLEAN      NOT NULL,  
  lowerBound   INT          NOT NULL,  
  upperBound   INT          NOT NULL,  
  PRIMARY KEY (groupID)  
);
```

2.11 Infection_History

```
CREATE TABLE IF NOT EXISTS covidhistory (  
  personID      INT      NOT NULL,  
  dateOfInfection DATE    NOT NULL,  
  PRIMARY KEY (personID, dateOfInfection),  
  FOREIGN KEY (personID ) REFERENCES Person(pID)  
    ON DELETE CASCADE ON UPDATE CASCADE  
);
```

3. SQL Queries

3.1 Query 1

Get details by province of all the people who got vaccinated at least one dose and are of group ages 2 to 10 (first-name, last-name, date of birth, Medicare number if applicable, Passport number if applicable, email, phone, city, date of vaccination, vaccination type, been infected by COVID-19 before or not).

```
SELECT p.firstName, p.lastName, p.dob,
      (SELECT medicareID FROM Registered r WHERE r.pID = p.pID) as
'Medicare number',
      (SELECT passNum FROM NotRegistered nr WHERE nr.pID = p.pID) as
'Passport number',
      p.email, p.telNum as phone, p.city,
      v.`date` as 'vaccination date', v.`type` as 'type of vaccination',
      (
        SELECT
          CASE WHEN EXISTS
            (
              SELECT * FROM covidhistory c
              WHERE c.personID = p.pID
            )
          THEN 'TRUE'
          ELSE 'FALSE'
        END
      ) as 'been infected by COVID-19'
FROM Person p, Vaccination v
WHERE p.pID = v.pID
AND (ageGroup BETWEEN 2 AND 10)
AND v.doseNumber = 1
AND p.province = 'QC';
```

** p.province in the where clause is the only element that will change for all query.

British Columbia (BC):

firstName	lastName	dob	Medicare number	Passport number	email	phone	city	vaccination date	type of vaccination	been infected by COVID-19
Carlos	Vans	2010-05-15	19	NULL	cv@gmail.com	8123771787	Vancouver	2021-07-21	Moderna	TRUE
Neill	Haley	1993-01-01	NULL	1	nh@gmail.com	8691236655	Vancouver	2021-06-11	Pfizer	TRUE
Micheal	Brabhams	1976-03-12	NULL	3	mb@gmail.com	8129120123	Vancouver	2021-07-09	Moderna	TRUE

Alberta (AB):

firstName	lastName	dob	Medicare number	Passport number	email	phone	city	vaccination date	type of vaccination	been infected by COVID-19
Albert	Albertson	1950-12-01	15	NULL	aa@gmail.com	8125719521	Calgary	2021-05-19	Moderna	TRUE

Saskatchewan (SK):

firstName	lastName	dob	Medicare number	Passport number	email	phone	city	vaccination date	type of vaccination	been infected by COVID-19
Rei	Williams	1960-05-23	14	NULL	rw@gmail.com	8190312346	Saskatoon	2021-05-21	Pfizer	FALSE

Manitoba (MB):

firstName	lastName	dob	Medicare number	Passport number	email	phone	city	vaccination date	type of vaccination	been infected by COVID-19
-----------	----------	-----	-----------------	-----------------	-------	-------	------	------------------	---------------------	---------------------------

New Brunswick (NB):

firstName	lastName	dob	Medicare number	Passport number	email	phone	city	vaccination date	type of vaccination	been infected by COVID-19
-----------	----------	-----	-----------------	-----------------	-------	-------	------	------------------	---------------------	---------------------------

Newfoundland and Labrador (NL):

firstName	lastName	dob	Medicare number	Passport number	email	phone	city	vaccination date	type of vaccination	been infected by COVID-19
-----------	----------	-----	-----------------	-----------------	-------	-------	------	------------------	---------------------	---------------------------

Nova Scotia (NS):

firstName	lastName	dob	Medicare number	Passport number	email	phone	city	vaccination date	type of vaccination	been infected by COVID-19
-----------	----------	-----	-----------------	-----------------	-------	-------	------	------------------	---------------------	---------------------------

Prince Edward Island (PE):

firstName	lastName	dob	Medicare number	Passport number	email	phone	city	vaccination date	type of vaccination	been infected by COVID-19
-----------	----------	-----	-----------------	-----------------	-------	-------	------	------------------	---------------------	---------------------------

Ontario (ON):

firstName	lastName	dob	Medicare number	Passport number	email	phone	city	vaccination date	type of vaccination	been infected by COVID-19
Mark	Nate	1990-05-12	21	NULL	pp@gmail.com	8129120123	Toronto	2021-06-14	Moderna	TRUE
Patricia	Johnson	2017-01-01	20	NULL	pj@gmail.com	8423459900	Ottawa	2021-04-28	JohnsonNJohnson	FALSE

Quebec (QC):

firstName	lastName	dob	Medicare number	Passport number	email	phone	city	vaccination date	type of vaccination	been infected by COVID-19
Patrick	Henry	2005-07-23	18	NULL	ph@gmail.com	8181293232	Montreal	2021-06-15	Pfizer	FALSE
Roger	Rabbit	1990-01-01	11	NULL	rr@gmail.com	1112223333	Montreal	2020-06-25	Pfizer	TRUE
Carol	York	2017-10-26	NULL	7	cy@gmail.com	8546345123	Quebec City	2020-09-24	Pfizer	TRUE

3.2 Query 2

Get details by province of all the people of 18 years of age and older that are registered with the public care system and have never been vaccinated (first-name, last-name, date of birth, email, phone, city, been infected by COVID-19 before or not).

```
SELECT DISTINCT firstName, lastName, dob, email, telNum, city,  
  (SELECT CASE WHEN EXISTS  
    (SELECT *  
      FROM covidhistory  
      WHERE personID = P.pID)  
    THEN 'TRUE' ELSE 'FALSE' END  
  ) as 'covidHistory'  
FROM Registered R, Person P, Vaccination V  
WHERE R.pID = P.pID AND R.pID <> V.pID AND '2003-10-11' > dob;
```

firstName	lastName	dob	email	telNum	city	covidHistory
Ho	Lee	1941-03-01	hlee@gmail.com	4381234441	Toronto	FALSE
Ken	Tucky	1969-01-01	kfcfan@gmail.com	5145554444	Montreal	FALSE
Mark	Nate	1990-05-12	pp@gmail.com	8129120123	Toronto	TRUE
Eric	Boop	1945-12-25	eb@gmail.com	9123461232	Quebec City	TRUE
Jay	Jameson	1940-02-12	jj@gmail.com	9012839591	Edmonton	FALSE
Albert	Albertson	1950-12-01	aa@gmail.com	8125719521	Calgary	TRUE
Rei	Williams	1960-05-23	rw@gmail.com	8190312346	Saskatoon	FALSE
Mark	Gutierrez	1970-11-12	mg@gmail.com	5236431111	Vancouver	TRUE
Jen	Siro	1980-05-01	js@gmail.com	1233212211	Toronto	FALSE
Roger	Rabbit	1990-01-01	rr@gmail.com	1112223333	Montreal	TRUE

3.3 Query 3

Get details of all the Vaccination facilities in Québec (name, address, phone number, web address, type, capacity, manager's first name and last name, total number of employees and total number of nurses).

```
SELECT Facility.name, Facility.address, Facility.phone,
Facility.web, Facility.type, Facility.capacity, Person.firstName,
Person.lastName,

(
SELECT COUNT(WorksAt.eID)
FROM WorksAt
WHERE WorksAt.facilityName = Facility.name
) AS NumberOfEmployees,

(
SELECT COUNT(WorksAt.eID)
FROM WorksAt, PublicHealthWorker nurse
WHERE WorksAt.facilityName = Facility.name
AND nurse.eID = WorksAt.eID
AND nurse.type = 'nurse'
) AS NumberOfNurses

FROM Facility, PublicHealthWorker manager, Person

WHERE Facility.managerID = manager.eID
AND Person.pID = manager.pID AND Facility.province = 'QC';
```

name	address	phone	web	type	capacity	firstName	lastName	NumberOfEmployees	NumberOfNurses
Bank Hospital	Tin Street	8812391238	www.bankhospital.com	hospital	10	Vincent	Kane	1	0
J General Hospital	Blvd. St. Laurent	8672316641	www.jgeneralhospital.com	hospital	50	Roger	Rabbit	7	4
Pharmaprix 1	rue Jean-Talon	8767712233	www.pharmaprixjt.com	clinic	2	Mark	Gutierrez	2	1
Pharmaprix 2	rue de Salaberri	8787812354	www.pharmaprixrs.com	clinic	2	Mark	Nate	2	1
R General Hospital	Mountain Street	7627542233	www.rgeneralhospital.com	hospital	20	Jen	Siro	1	0
Zen Clinic	Woodland District	8912371231	www.zenclinic.com	clinic	3	Bane Tracy	Parking	1	0

3.4 Query 4

Get details of all the people who got vaccinated in Québec and are not registered with the public health care system (first-name, last-name, date of birth, email, phone, citizenship, date of vaccination, vaccination type, been infected by COVID-19 before or not).

```
SELECT firstName, lastName, dob, email, telNum, citizenship,  
       LTRIM(V.date) as 'vaccination date', V.type as 'vaccination type',  
       (SELECT CASE WHEN EXISTS  
         (SELECT * FROM covidhistory  
          WHERE personID = P.pID)  
         THEN 'TRUE' ELSE 'FALSE' END  
       ) as 'covidHistory'  
FROM NotRegistered NR, Person P, Vaccination V, Facility F  
WHERE NR.pID = P.pID AND NR.pID = V.pID AND V.location = F.name  
      AND F.province = 'QC';
```

	ABC firstName	ABC lastName	dob	ABC email	ABC telNum	ABC citizenship	ABC vaccination date	ABC vaccination type	ABC covidHistory
1	Carol	York	2017-10-26	cy@gmail.com	8546345123	Canadian	2020-09-24	Pfizer	TRUE
2	Neill	Haley	1993-01-01	nh@gmail.com	8691236655	Canadian	2021-06-11	Pfizer	TRUE
3	Kiara	Brabhams	1980-11-23	kb@gmail.com	8912391232	Canadian	2021-07-25	Moderna	FALSE
4	Micheal	Brabhams	1976-03-12	mb@gmail.com	8129120123	Canadian	2021-07-09	Moderna	TRUE

3.5 Query 5

Get details of all the nurses that have never been vaccinated with any type of COVID-19 vaccination.

```
SELECT DISTINCT firstName, lastName, dob, email, telNum, city  
FROM Person P, PublicHealthWorker nurse  
WHERE nurse.pID NOT IN (SELECT pID FROM Vaccination) AND nurse.type =  
'nurse' AND nurse.pID = P.pID;
```

firstName	lastName	dob	email	telNum	city
Ken	Tucky	1969-01-01	kfcfan@gmail.com	5145554444	Montreal
Ho	Lee	1941-03-01	hlee@gmail.com	4381234441	Toronto

3.6 Query 6

Provide three different reports of vaccination for three different people: one person with no vaccination, one person with one dose COVID-19 vaccination, and one person with two doses of COVID-19 vaccination and one positive COVID-19 infection. The report for every person should include the first name, last name, date of birth, the number of doses taken, and the number of positive COVID-19 diagnoses.

A person with no vaccination

```
SELECT Person.firstName, Person.lastName, Person.dob,
(
SELECT COUNT(covidhistory.personID)
FROM covidhistory
WHERE covidhistory.personID = Person.pID
) AS NumberOfInfections,
(
SELECT COALESCE(MAX(Vaccination.doseNumber),0)
FROM Vaccination
Where Vaccination.pId = Person.pID
) AS NumberOfDoses
FROM Person
WHERE Person.firstName = 'Jen' AND Person.lastName = 'Siro';
```

	firstName	lastName	dob	NumberOfInfections	NumberOfDoses
▶	Jen	Siro	1980-05-01	0	0

A person with one dose

```
SELECT Person.firstName, Person.lastName, Person.dob,
(
SELECT COUNT(covidhistory.personID)
FROM covidhistory
WHERE covidhistory.personID = Person.pID
) AS NumberOfInfections,
(
SELECT COALESCE(MAX(Vaccination.doseNumber),0)
FROM Vaccination
Where Vaccination.pId = Person.pID
) AS NumberOfDoses

FROM Person
WHERE Person.firstName = 'Jay' AND Person.lastName = 'Jameson';
```

	firstName	lastName	dob	NumberOfInfections	NumberOfDoses
▶	Jay	Jameson	1940-02-12	0	1

A person with two doses and one positive infection

```
SELECT Person.firstName, Person.lastName, Person.dob,
(
SELECT COUNT(covidhistory.personID)
FROM covidhistory
WHERE covidhistory.personID = Person.pID
) AS NumberOfInfections,
(
SELECT COALESCE(MAX(Vaccination.doseNumber),0)
FROM Vaccination
Where Vaccination.pId = Person.pID
) AS NumberOfDoses

FROM Person
WHERE Person.firstName = 'Carlos' AND Person.lastName = 'Vans';
```

	firstName	lastName	dob	NumberOfInfections	NumberOfDoses
▶	Carlos	Vans	2010-05-15	1	2

3.7 Query 7

Provide a description of all the vaccinations used in Québec (Name of the vaccination, date of approval of the vaccination, status of the vaccination, total number of people vaccinated with the vaccination).

```
SELECT DISTINCT Vaccine.name, Vaccine.approvalDate, Vaccine.status,  
(  
  SELECT COUNT(DISTINCT Vaccination.pID)  
  FROM Vaccination  
  WHERE Vaccination.type = Vaccine.name  
) AS NumberOfPeopleVaccinated  
  
FROM Vaccine, Vaccination, Facility  
WHERE Vaccine.name = Vaccination.type  
AND Vaccination.location = Facility.name  
AND Facility.province = 'QC';
```

name	approvalDate	status	NumberOfVaccinatedPeople
Pfizer	2021-04-12	SAFE	7
Moderna	2021-04-23	SAFE	6
JohnsonNJohnson	2021-06-02	SAFE	2

3.8 Query 8

For a given location, provide a report by the nurse indicating the nurse's first name, last name, the start date of work, and the number of vaccinations given by the nurse.

Using location 'J General Hospital'

```
SELECT  Person.firstName, Person.lastName, WorksAt.startDate,
(
SELECT Count(Vaccination.vID)
FROM Vaccination
Where Vaccination.eID = WorksAt.eID
      AND WorksAt.eID = phw.eID
      AND Vaccination.location = 'J General Hospital'
) AS NumberOfVaccinations

FROM WorksAt, Person
LEFT JOIN PublicHealthWorker phw
ON phw.pID = Person.pID
Where WorksAt.eID = phw.eID
      AND phw.type = 'nurse'
      AND WorksAt.facilityName = 'J General Hospital';
```

firstName	lastName	startDate	NumberOfVaccinations
Rei	Williams	2020-06-15	2
Patrick	Henry	2017-06-17	2
Carlos	Vans	2014-10-30	1
Patricia	Johnson	2017-11-20	1

3.9 Query 9

Provide a report of people who got vaccinated by the city in all the cities in the province of Québec. The report should include the city name and the number of people vaccinated in each city.

****We assumed that vaccinated meant 1 dose and that a person would not be counted twice in the same city.**

```
SELECT f.city, COALESCE(COUNT(DISTINCT v.pID), 0) as 'number of vaccinated'
FROM Facility f, Vaccination v
WHERE f.province = 'QC' AND v.location = f.name
GROUP BY f.city;
```

city	number of vaccinated
Gatineau	1
Montreal	10
Quebec City	1

4. Populate Database

Person:

```
INSERT INTO Person(pID, firstName, lastName, dob, ageGroup, city, province, email,
postalCode, telNum, citizenship, address)
VALUES
    (26, 'Roger', 'Rabbit', '1990-01-01', 6, 'Montreal', 'QC', 'rr@gmail.com',
'h4e2r2', 1112223333, 'Canadian', '4421 Tune Street'),
    (27, 'Jen', 'Siro', '1980-05-01', 5, 'Toronto', 'ON', 'js@gmail.com',
't4y4e3', 1233212211, 'Canadian', '8712 West Street'),
    (28, 'Mark', 'Gutierrez', '1970-11-12', 4, 'Vancouver', 'BC', 'mg@gmail.com',
't4y4e3', 5236431111, 'Canadian', '9091 East Street'),
    (29, 'Rei', 'Williams', '1960-05-23', 3, 'Saskatoon', 'SK', 'rw@gmail.com',
'o7r3h4', 8190312346, 'Canadian', '6566 Bay Street'),
    (30, 'Albert', 'Albertson', '1950-12-01', 2, 'Calgary', 'AB', 'aa@gmail.com',
't3y3v1', 8125719521, 'Canadian', '8541 Ink Street'),
    (31, 'Jay', 'Jameson', '1940-02-12', 1, 'Edmonton', 'AB', 'jj@gmail.com',
'k1h2f3', 9012839591, 'Canadian', '8123 Big Street'),
    (32, 'Eric', 'Boop', '1945-12-25', 2, 'Quebec City', 'QC', 'eb@gmail.com',
'o1o2p3', 9123461232, 'Canadian', '1920 Jay Street'),
    (33, 'Patrick', 'Henry', '2005-07-23', 8, 'Montreal', 'QC', 'ph@gmail.com',
'h7y3e2', 8181293232, 'Canadian', '8800 North Street'),
    (34, 'Carlos', 'Vans', '2010-05-15', 9, 'Vancouver', 'BC', 'cv@gmail.com',
'm2m4k1', 8123771787, 'Canadian', '1283 Henry Street'),
    (35, 'Patricia', 'Johnson', '2017-01-01', 10, 'Ottawa', 'ON', 'pj@gmail.com',
'h4e2r2', 8423459900, 'Canadian', '2181 Long Street'),
    (36, 'Neill', 'Haley', '1993-01-01', 7, 'Vancouver', 'BC', 'nh@gmail.com',
'k1l8k2', 8691236655, 'Canadian', '8961 Kay Street'),
    (37, 'Kiara', 'Brabhams', '1980-11-23', 5, 'Toronto', 'ON', 'kb@gmail.com',
'n1g2u8', 8912391232, 'Canadian', '7123 Bench Street'),
    (38, 'Micheal', 'Brabhams', '1976-03-12', 5, 'Vancouver', 'BC',
'mb@gmail.com', 'l7o1j2', 8129120123, 'Canadian', '1723 York Street'),
    (39, 'Mick', 'Taylor', '1964-03-12', 4, 'Edmonton', 'AB', 'mt@gmail.com',
'y2e2d2', 8181235641, 'Canadian', '6541 Jersey Street'),
    (40, 'Amelia', 'Hunt', '1990-11-04', 6, 'Vancouver', 'BC', 'ah@gmail.com',
't4e3s9', 8681930011, 'Canadian', '7659 Short Street'),
    (41, 'Jane', 'Mark', '1992-12-24', 7, 'Calgary', 'AB', 'jm@gmail.com',
'k7h4d2', 8613210011, 'Canadian', '9120 Kit Street'),
    (42, 'Carol', 'York', '2017-10-26', 10, 'Quebec City', 'QC', 'cy@gmail.com',
'j5g4d3', 8546345123, 'Canadian', '9345 Mint Street'),
    (43, 'George', 'Vane', '2020-05-13', 10, 'Vancouver', 'BC', 'gv@gmail.com',
'h4f2s2', 8456412359, 'Canadian', '9891 Rent Street'),
    (44, 'Ben', 'Eleven', '2005-03-12', 8, 'Montreal', 'QC', 'be@gmail.com',
```

'1701j2', 8612356788, 'Canadian', '7563 Gen Street'),
 (45, 'Peter', 'Parking', '1990-05-12', 6, 'Toronto', 'ON', 'pp@gmail.com',
 '1701j2', 8129120123, 'Canadian', '1723 York Street'),
 (46, 'Mark', 'Nate', '1990-05-12', 6, 'Toronto', 'ON', 'pp@gmail.com',
 '1701j2', 8129120123, 'Canadian', '1723 York Street'),
 (47, 'Jane', 'King', '1990-05-12', 6, 'Toronto', 'ON', 'pp@gmail.com',
 '1701j2', 8129120123, 'Canadian', '1723 York Street'),
 (48, 'Karen', 'Vine', '1990-05-12', 6, 'Toronto', 'ON', 'pp@gmail.com',
 '1701j2', 8129120123, 'Canadian', '1723 York Street'),
 (49, 'Vincent', 'Kane', '1990-05-12', 6, 'Toronto', 'ON', 'pp@gmail.com',
 '1701j2', 8129120123, 'Canadian', '1723 York Street'),
 (50, 'Bane Tracy', 'Parking', '1990-05-12', 6, 'Toronto', 'ON',
 'pp@gmail.com', '1701j2', 8129120123, 'Canadian', '1723 York Street'),
 (51, 'Ken', 'Tucky', '1969-01-01', 4, 'Montreal', 'QC', 'kfcfan@gmail.com',
 'h1p2s2', 5145554444, 'Canadian', '3412 Chicken Street'),
 (52, 'Ho', 'Lee', '1941-03-01', 1, 'Toronto', 'ON', 'hlee@gmail.com',
 's4e1n1', 4381234441, 'Canadian', '4516 Happy Street');

pID	firstName	lastName	dob	telNum	address	city	province	postalCode	citizenship	email	ageGroup
26	Roger	Rabbit	1990-01-01	1112223333	4421 Tune Street	Montreal	QC	h4e2r2	Canadian	rr@gmail.com	6
27	Jen	Siro	1980-05-01	1233212211	8712 West Street	Toronto	ON	t4y4e3	Canadian	js@gmail.com	5
28	Mark	Gutierrez	1970-11-12	5236431111	9091 East Street	Vancouver	BC	t4y4e3	Canadian	mg@gmail.com	4
29	Rei	Williams	1960-05-23	8190312346	6566 Bay Street	Saskatoon	SK	o7r3h4	Canadian	rw@gmail.com	3
30	Albert	Albertson	1950-12-01	8125719521	8541 Ink Street	Calgary	AB	t3y3v1	Canadian	aa@gmail.com	2
31	Jay	Jameson	1940-02-12	9012839591	8123 Big Street	Edmonton	AB	k1h2f3	Canadian	jj@gmail.com	1
32	Eric	Boop	1945-12-25	9123461232	1920 Jay Street	Quebec City	QC	o1o2p3	Canadian	eb@gmail.com	2
33	Patrick	Henry	2005-07-23	8181293232	8800 North Street	Montreal	QC	h7y3e2	Canadian	ph@gmail.com	8
34	Carlos	Vans	2010-05-15	8123771787	1283 Henry Street	Vancouver	BC	m2m4k1	Canadian	cv@gmail.com	9
35	Patricia	Johnson	2017-01-01	8423459900	2181 Long Street	Ottawa	ON	h4e2r2	Canadian	pj@gmail.com	10
36	Neill	Haley	1993-01-01	8691236655	8961 Kay Street	Vancouver	BC	k1l8k2	Canadian	nh@gmail.com	7
37	Kiara	Brabhams	1980-11-23	8912391232	7123 Bench Street	Toronto	ON	n1g2u8	Canadian	kb@gmail.com	5
38	Michael	Brabhams	1976-03-12	8129120123	1723 York Street	Vancouver	BC	l7o1j2	Canadian	mb@gmail.com	5
39	Mick	Taylor	1964-03-12	8181235641	6541 Jersey Street	Edmonton	AB	y2e2d2	Canadian	mt@gmail.com	4
40	Amelia	Hunt	1990-11-04	8681930011	7659 Short Street	Vancouver	BC	t4e3s9	Canadian	ah@gmail.com	6
41	Jane	Mark	1992-12-24	8613210011	9120 Kit Street	Calgary	AB	k7h4d2	Canadian	jm@gmail.com	7
42	Carol	York	2017-10-26	8546345123	9345 Mint Street	Quebec City	QC	j5g4d3	Canadian	cy@gmail.com	10
43	George	Vane	2020-05-13	8456412359	9891 Rent Street	Vancouver	BC	h4f2s2	Canadian	gv@gmail.com	10
44	Ben	Eleven	2005-03-12	8612356788	7563 Gen Street	Montreal	QC	l7o1j2	Canadian	be@gmail.com	8
45	Peter	Parking	1990-05-12	8129120123	1723 York Street	Toronto	ON	l7o1j2	Canadian	pp@gmail.com	6
46	Mark	Nate	1990-05-12	8129120123	1723 York Street	Toronto	ON	l7o1j2	Canadian	pp@gmail.com	6
47	Jane	King	1990-05-12	8129120123	1723 York Street	Toronto	ON	l7o1j2	Canadian	pp@gmail.com	6
48	Karen	Vine	1990-05-12	8129120123	1723 York Street	Toronto	ON	l7o1j2	Canadian	pp@gmail.com	6
49	Vincent	Kane	1990-05-12	8129120123	1723 York Street	Toronto	ON	l7o1j2	Canadian	pp@gmail.com	6
50	Bane Tracy	Parking	1990-05-12	8129120123	1723 York Street	Toronto	ON	l7o1j2	Canadian	pp@gmail.com	6
51	Ken	Tucky	1969-01-01	5145554444	3412 Chicken Street	Montreal	QC	h1p2s2	Canadian	kfcfan@gmail....	4
52	Ho	Lee	1941-03-01	4381234441	4516 Happy Street	Toronto	ON	s4e1n1	Canadian	hlee@gmail.com	1

Registered:

```
INSERT INTO Registered(pID, medicareID)
VALUES
```

```
    (26,11),
    (27,12),
    (28,13),
    (29,14),
    (30,15),
    (31,16),
    (32,17),
    (33,18),
    (34,19),
    (35,20),
    (46,21),
    (47,22),
    (48,23),
    (49,24),
    (50,25),
    (51,26),
    (52,27);
```

pID	medicareID
26	11
27	12
28	13
29	14
30	15
31	16
32	17
33	18
34	19
35	20
46	21
47	22
48	23
49	24
50	25
51	26
52	27

Medicare Card:

```
INSERT INTO MedicareCard(medicardID, doissue, doexpire)
VALUES
```

```
(11, '2020-02-13', '2023-02-13'),
(12, '2018-09-20', '2021-09-20'),
(13, '2018-12-13', '2021-12-13'),
(14, '2021-02-13', '2024-02-13'),
(15, '2019-04-21', '2022-04-21'),
(16, '2019-09-15', '2023-09-15'),
(17, '2018-03-04', '2021-03-04'),
(18, '2020-06-26', '2023-06-26'),
(19, '2020-07-12', '2023-07-12'),
(20, '2020-02-13', '2023-02-13'),
(21, '1990-01-12', '2021-10-20'),
(22, '1990-01-12', '2021-10-20'),
(23, '1990-01-12', '1992-10-20'),
(24, '1990-01-12', '1992-10-20'),
(25, '1990-01-12', '1992-10-20'),
(26, '2021-02-13', '2024-02-13'),
(27, '2019-09-20', '2023-09-20');
```

medicardID	doissue	doexpire
11	2020-02-13	2023-02-13
12	2018-09-20	2021-09-20
13	2018-12-13	2021-12-13
14	2021-02-13	2024-02-13
15	2019-04-21	2022-04-21
16	2019-09-15	2023-09-15
17	2018-03-04	2021-03-04
18	2020-06-26	2023-06-26
19	2020-07-12	2023-07-12
20	2020-02-13	2023-02-13
21	1990-01-12	2021-10-20
22	1990-01-12	2021-10-20
23	1990-01-12	1992-10-20
24	1990-01-12	1992-10-20
25	1990-01-12	1992-10-20
26	2021-02-13	2024-02-13
27	2019-09-20	2023-09-20

Not Registered:

```
INSERT INTO NotRegistered(pID, passNum)
VALUES
```

```
  (36,1),
  (37,2),
  (38,3),
  (39,4),
  (40,5),
  (41,6),
  (42,7),
  (43,8),
  (44,9),
  (45,10);
```

123 pID	ABC passNum
36	1
37	2
38	3
39	4
40	5
41	6
42	7
43	8
44	9
45	10

Public Health Worker:

```
INSERT INTO PublicHealthWorker(eID, pID, medicardID, type)
VALUES
```

```
(1, 26, 11, 'manager'),
(2, 27, 12, 'manager'),
(3, 28, 13, 'manager'),
(4, 29, 14, 'nurse'),
(5, 30, 15, 'manager'),
(6, 31, 16, 'secretary'),
(7, 32, 17, 'security'),
(8, 33, 18, 'nurse'),
(9, 34, 19, 'nurse'),
(10, 35, 20, 'nurse'),
(11, 46, 21, 'manager'),
(12, 47, 22, 'manager'),
(13, 48, 23, 'manager'),
(14, 49, 24, 'manager'),
(15, 50, 25, 'manager'),
(16, 51, 26, 'nurse'),
(17, 52, 27, 'nurse');
```

eID	pID	medicardID	type
1	26	11	manager
2	27	12	manager
3	28	13	manager
4	29	14	nurse
5	30	15	manager
6	31	16	secretary
7	32	17	security
8	33	18	nurse
9	34	19	nurse
10	35	20	nurse
11	46	21	manager
12	47	22	manager
13	48	23	manager
14	49	24	manager
15	50	25	manager
16	51	26	nurse
17	52	27	nurse

Vaccination Facilities:

```
INSERT INTO Facility (name, address, city, province, postalCode, phone,
web, type, capacity, managerID)
VALUES
    ('J General Hospital', 'Blvd. St. Laurent', 'Montreal', 'QC', 'g1v4b7',
'8672316641', 'www.jgeneralhospital.com', 'hospital', 50, 1),
    ('Pharmaprix 1', 'rue Jean-Talon', 'Montreal', 'QC', 'c2b3j2',
'8767712233', 'www.pharmaprixjt.com', 'clinic', 2, 3),
    ('Pharmaprix 2', 'rue de Salaberri', 'Montreal', 'QC', 'g7h8g3',
'8787812354', 'www.pharmaprixrs.com', 'clinic', 2, 11),
    ('Bay Camp', 'Green Street', 'Vancouver', 'BC', 'h4g1f2', '8612367321',
'www.baycamp.com', 'special', 1, 5),
    ('R General Hospital', 'Mountain Street', 'Quebec City', 'QC',
'h3d2s2', '7627542233', 'www.rgeneralhospital.com', 'hospital', 20, 2),
    ('London General Hospital', 'Red Street', 'London', 'ON', 'g4f3d2',
'7123529988', 'londongenerahospital.com', 'hospital', 25, null),
    ('Camper Clinic', 'Lonely Street', 'Calgary', 'AB', 'h4d2k7',
'8234823122', 'www.camperclinic.com', 'clinic', 3, 12),
    ('Night Clinic', 'Maker Street', 'Edmonton', 'AB', 'm2n2c8',
'8681273218', 'www.nightclinic.com', 'clinic', 2, 13),
    ('Bank Hospital', 'Tin Street', 'Laval', 'QC', 'm6n5b1', '8812391238',
'www.bankhospital.com', 'hospital', 10, 14),
    ('Zen Clinic', 'Woodland District', 'Gatineau', 'QC', 'm4n1b9',
'8912371231', 'www.zenclinic.com', 'clinic', 3, 15);
```

name	address	city	province	postalCode	phone	web	type	capacity	managerID
Bank Hospital	Tin Street	Laval	QC	m6n5b1	8812391238	www.bankhospital.com	hospital	10	14
Bay Camp	Green Street	Vancouver	BC	h4g1f2	8612367321	www.baycamp.com	special	1	5
Camper Clinic	Lonely Street	Calgary	AB	h4d2k7	8234823122	www.camperclinic.com	clinic	3	12
J General Hospital	Blvd. St. Laurent	Montreal	QC	g1v4b7	8672316641	www.jgeneralhospital.com	hospital	50	1
London General Hospital	Red Street	London	ON	g4f3d2	7123529988	londongenerahospital.com	hospital	25	[NULL]
Night Clinic	Maker Street	Edmonton	AB	m2n2c8	8681273218	www.nightclinic.com	clinic	2	13
Pharmaprix 1	rue Jean-Talon	Montreal	QC	c2b3j2	8767712233	www.pharmaprixjt.com	clinic	2	3
Pharmaprix 2	rue de Salaberri	Montreal	QC	g7h8g3	8787812354	www.pharmaprixrs.com	clinic	2	11
R General Hospital	Mountain Street	Quebec City	QC	h3d2s2	7627542233	www.rgeneralhospital.com	hospital	20	2
Zen Clinic	Woodland District	Gatineau	QC	m4n1b9	8912371231	www.zenclinic.com	clinic	3	15

Vaccination:

```
INSERT INTO Vaccination(vID, pID, location, eID, type, country, lotNum,
doseNumber, date)
```

```
VALUES
```

```
(11, 29, 'Wallstreet Bank', null, 'Pfizer', 'USA', 1, 1, '2021-05-21'),
(12, 33, 'J General Hospital', 4, 'Pfizer', 'CAN', 1, 2, '2021-06-15'),
(13, 46, 'facility9', null, 'Moderna', 'FRA', 54, 1, '2021-06-14'),
(14, 34, 'Pharmaprix 1', 8, 'Moderna', 'CAN', 65, 1, '2021-07-21'),
(15, 35, 'Pharmaprix 2', 9, 'JohnsonNJohnson', 'CAN', 12, 1, '2021-04-28'),
(16, 29, 'J General Hospital', 10, 'Pfizer', 'CAN', 7, 2, '2021-03-25'),
(17, 33, 'J General Hospital', 4, 'JohnsonNJohnson', 'CAN', 1, 2,
'2021-07-18'),
(18, 46, 'J General Hospital', 8, 'Moderna', 'CAN', 25, 2, '2020-09-24'),
(19, 34, 'J General Hospital', 8, 'Pfizer', 'CAN', 45, 2, '2021-10-03'),
(20, 35, 'Pharmaprix 2', 9, 'Moderna', 'CAN', 3, 2, '2020-03-07'),
(21, 26, 'Pharmaprix 2', 9, 'Pfizer', 'CAN', 6, 1, '2020-06-25'),
(22, 30, 'Pharmaprix 1', 8, 'Moderna', 'CAN', 8, 1, '2021-05-19'),
(23, 31, 'Pharmaprix 1', 8, 'Pfizer', 'CAN', 10, 1, '2020-08-20'),
(24, 42, 'R General Hospital', 4, 'Pfizer', 'CAN', 18, 1, '2020-09-24'),
(25, 36, 'Zen Clinic', 9, 'Pfizer', 'CAN', 12, 1, '2021-06-11'),
(26, 37, 'Pharmaprix 1', 10, 'Moderna', 'CAN', 6, 2, '2021-07-25'),
(27, 38, 'J General Hospital', 9, 'Moderna', 'CAN', 20, 1, '2021-07-09');
```

vID	pID	location	eID	type	country	lotNum	doseNumber	date
11	29	Wallstreet Bank	[NULL]	Pfizer	USA	1	1	2021-05-21
12	33	J General Hospital	4	Pfizer	CAN	1	1	2021-06-15
13	46	facility9	[NULL]	Moderna	FRA	54	1	2021-06-14
14	34	Pharmaprix 1	8	Moderna	CAN	65	1	2021-07-21
15	35	Pharmaprix 2	9	JohnsonNJohnson	CAN	12	1	2021-04-28
16	29	J General Hospital	10	Pfizer	CAN	7	2	2021-03-25
17	33	J General Hospital	4	JohnsonNJohnson	CAN	1	2	2021-07-18
18	46	J General Hospital	8	Moderna	CAN	25	2	2020-09-24
19	34	J General Hospital	8	Pfizer	CAN	45	2	2021-10-04
20	35	Pharmaprix 2	9	Moderna	CAN	3	2	2020-03-07
21	26	Pharmaprix 2	9	Pfizer	CAN	6	1	2020-06-25
22	30	Pharmaprix 1	8	Moderna	CAN	8	1	2021-05-19
23	31	Pharmaprix 1	8	Pfizer	CAN	10	1	2020-08-20
24	42	R General Hospital	4	Pfizer	CAN	18	1	2020-09-24
25	36	Zen Clinic	9	Pfizer	CAN	12	1	2021-06-11
26	37	Pharmaprix 1	10	Moderna	CAN	6	2	2021-07-25
27	38	J General Hospital	9	Moderna	CAN	20	1	2021-07-09

Works at:

```
INSERT INTO WorksAt
(eID, facilityName, startDate, endDate)
VALUES
(14, 'Bank Hospital', '2019-04-23', '2022-02-26'),
(5, 'Bay Camp', '2015-07-27', '2030-03-18'),
(12, 'Camper Clinic', '2017-02-04', '2025-08-09'),
(4, 'J General Hospital', '2020-06-15', '2022-06-15'),
(1, 'J General Hospital', '2018-09-30', '2023-07-20'),
(13, 'Night Clinic', '2016-04-24', '2022-03-28'),
(8, 'Pharmaprix 1', '2020-07-21', '2023-07-21'),
(3, 'Pharmaprix 1', '2018-04-17', '2025-03-28'),
(9, 'Pharmaprix 2', '2020-04-28', '2023-04-28'),
(11, 'Pharmaprix 2', '2020-01-13', '2022-01-20'),
(2, 'R General Hospital', '2012-05-17', '2027-08-19'),
(15, 'Zen Clinic', '2019-06-17', '2025-03-20');
```

eID	facilityName	startDate	endDate
1	J General Hospital	2018-09-30	2023-07-20
2	R General Hospital	2012-05-17	2027-08-19
3	Pharmaprix 1	2018-04-17	2025-03-28
4	J General Hospital	2020-06-15	2022-06-15
5	Bay Camp	2015-07-27	2030-03-18
6	J General Hospital	2015-07-22	2021-08-26
7	J General Hospital	2018-12-25	2024-08-28
8	J General Hospital	2017-06-17	2027-09-18
8	Pharmaprix 1	2020-07-21	2023-07-21
9	J General Hospital	2014-10-30	2028-09-29
9	Pharmaprix 2	2020-04-28	2023-04-28
10	J General Hospital	2017-11-20	2027-10-25
11	Pharmaprix 2	2020-01-13	2022-01-20
12	Camper Clinic	2017-02-04	2025-08-09
13	Night Clinic	2016-04-24	2022-03-28
14	Bank Hospital	2019-04-23	2022-02-26
15	Zen Clinic	2019-06-17	2025-03-20

Vaccine:

```
INSERT INTO Vaccine(name, status, approvalDate, suspendedDate, description)
VALUES
  ('Pfizer', 'SAFE', '2021-04-12', null, 'pfizer_desc'),
  ('AstraZeneca', 'SUSPENDED', '2021-05-20', '2021-06-21', 'az_desc'),
  ('Moderna', 'SAFE', '2021-04-23', null, 'moderna_desc'),
  ('JohnsonNJohanson', 'SAFE', '2021-06-02', null, 'jj_desc'),
  ('VaccineA', 'SUSPENDED', '2021-05-20', '2021-06-21', 'vaccine_a_desc'),
  ('VaccineB', 'SUSPENDED', '2021-05-20', '2021-06-21', 'vaccine_b_desc'),
  ('VaccineC', 'SUSPENDED', '2021-05-20', '2021-06-21', 'vaccine_c_desc'),
  ('VaccineD', 'SUSPENDED', '2021-05-20', '2021-06-21', 'vaccine_d_desc'),
  ('VaccineE', 'SUSPENDED', '2021-05-20', '2021-06-21', 'vaccine_e_desc'),
  ('VaccineF', 'SUSPENDED', '2021-05-20', '2021-06-21', 'vaccine_f_desc');
```

name	status	approvalDate	suspendedDate	description
AstraZeneca	SUSPENDED	2021-05-20	2021-06-21	az_desc
JohnsonNJohanson	SAFE	2021-06-02	[NULL]	jj_desc
Moderna	SAFE	2021-04-23	[NULL]	moderna_desc
Pfizer	SAFE	2021-04-12	[NULL]	pfizer_desc
VaccineA	SUSPENDED	2021-05-20	2021-06-21	vaccine_a_desc
VaccineB	SUSPENDED	2021-05-20	2021-06-21	vaccine_b_desc
VaccineC	SUSPENDED	2021-05-20	2021-06-21	vaccine_c_desc
VaccineD	SUSPENDED	2021-05-20	2021-06-21	vaccine_d_desc
VaccineE	SUSPENDED	2021-05-20	2021-06-21	vaccine_e_desc
VaccineF	SUSPENDED	2021-05-20	2021-06-21	vaccine_f_desc

Group age:

```
INSERT INTO GroupAge(groupID, status, lowerBound, upperBound)
VALUES
```

```
(1, false, 80, 100),
(2, false, 70, 79),
(3, false, 60, 69),
(4, false, 50, 59),
(5, false, 40, 49),
(6, false, 39, 39),
(7, false, 18, 29),
(8, false, 12, 17),
(9, false, 5, 11),
(10, false, 0, 4);
```

groupID	status	lowerBound	upperBound
1	0	80	100
2	0	70	79
3	0	60	69
4	0	50	59
5	0	40	49
6	0	39	39
7	0	18	29
8	0	12	17
9	0	5	11
10	0	0	4

Covid History:

```
INSERT INTO covidhistory  
VALUES
```

```
(26, '2020-10-26'),  
(28, '2020-11-30'),  
(30, '2021-12-25'),  
(32, '2021-05-21'),  
(34, '2020-03-18'),  
(36, '2021-01-15'),  
(38, '2020-02-08'),  
(40, '2020-02-04'),  
(42, '2020-08-01'),  
(44, '2021-09-06'),  
(46, '2021-04-16'),  
(48, '2021-06-18'),  
(50, '2020-07-17');
```

personID	dateOfInfection
26	2020-10-26
28	2020-11-30
30	2021-12-25
32	2021-05-21
34	2020-03-18
36	2021-01-15
38	2020-02-08
40	2020-02-04
42	2020-08-01
44	2021-09-06
46	2021-04-16
48	2021-06-18
50	2020-07-17

5. SELECT COUNT(*) FROM R

```
SELECT COUNT(*) FROM Facility;
```

COUNT(*)
10

```
SELECT COUNT(*) FROM GroupAge;
```

COUNT(*)
10

```
SELECT COUNT(*) FROM MedicareCard;
```

COUNT(*)
17

```
SELECT COUNT(*) FROM NotRegistered;
```

COUNT(*)
10

```
SELECT COUNT(*) FROM Person;
```

COUNT(*)
27

```
SELECT COUNT(*) FROM PublicHealthWorker;
```

COUNT(*)
17

```
SELECT COUNT(*) FROM Registered;
```

COUNT(*)
17

```
SELECT COUNT(*) FROM Vaccination;
```

COUNT(*)
17

```
SELECT COUNT(*) FROM Vaccine;
```

COUNT(*)
10

```
SELECT COUNT(*) FROM WorksAt;
```

COUNT(*)
17

```
SELECT COUNT(*) FROM covidhistory;
```

COUNT(*)
13