

CREATE TABLES

```
CREATE TABLE VaccineManufacturer(  
    manufacturer_name CHAR(32),  
    production_volume INTEGER,  
    production_rate INTEGER,  
    PRIMARY KEY (manufacturer_name)  
);  
  
CREATE TABLE VaccineReceiver(  
    phn BIGINT,  
    name CHAR(32),  
    email CHAR(40),  
    phone_number BIGINT,  
    date_of_birth DATE,  
    postal_code CHAR(7),  
    PRIMARY KEY (phn)  
);  
  
CREATE TABLE HealthWorker(  
    phn BIGINT,  
    name CHAR(40),  
    email CHAR(40),  
    PRIMARY KEY (phn)  
);  
  
CREATE TABLE Vaccine(  
    name CHAR(25),  
    vaccine_type CHAR(32),  
    number_of_shots INTEGER,  
    cooldown_days INTEGER,  
    manufacturer_name CHAR(32) UNIQUE NOT NULL,  
    PRIMARY KEY (name),  
    FOREIGN KEY (manufacturer_name) REFERENCES  
VaccineManufacturer(manufacturer_name) ON DELETE NO ACTION ON UPDATE CASCADE  
);  
  
CREATE TABLE VaccinationCenter(  
    center_id INTEGER,  
    name CHAR(32),  
    address CHAR(32),  
    postal_code CHAR(7),  
    state CHAR(32),  
    PRIMARY KEY (center_id)  
);
```

```
CREATE TABLE VaccineOrder(  
    order_id INTEGER,  
    manufacturer_name CHAR(32),  
    center_id INTEGER NOT NULL,  
    order_amount INTEGER,  
    order_date DATETIME,  
    PRIMARY KEY (order_id, manufacturer_name),  
    FOREIGN KEY (manufacturer_name) REFERENCES  
VaccineManufacturer(manufacturer_name) ON DELETE CASCADE ON UPDATE CASCADE,  
    FOREIGN KEY (center_id) REFERENCES VaccinationCenter(center_id) ON DELETE NO  
ACTION ON UPDATE CASCADE  
);
```

```
CREATE TABLE VaccinationAppointment(  
    appointment_id INTEGER,  
    center_id INTEGER,  
    date DATETIME,  
    center_name CHAR(128),  
    current BOOLEAN,  
    receiver_phn BIGINT NOT NULL,  
    PRIMARY KEY (appointment_id, center_id),  
    FOREIGN KEY (center_id) REFERENCES VaccinationCenter(center_id) ON DELETE  
CASCADE ON UPDATE CASCADE,  
    FOREIGN KEY (receiver_phn) REFERENCES VaccineReceiver(phn) ON DELETE NO  
ACTION ON UPDATE CASCADE  
);
```

```
CREATE TABLE SideEffect(  
    body_part CHAR(40),  
    complaint CHAR(50),  
    PRIMARY KEY (body_part, complaint)  
);
```

```
CREATE TABLE SideEffectHappenedToVaccineReceiver(  
    receiver_phn BIGINT,  
    body_part CHAR(40),  
    complaint CHAR(50),  
    date_of_complaint DATE,  
    PRIMARY KEY (receiver_phn, body_part, complaint),  
    FOREIGN KEY (receiver_phn) REFERENCES VaccineReceiver(phn) ON DELETE CASCADE  
ON UPDATE CASCADE,  
    FOREIGN KEY (body_part, complaint) REFERENCES SideEffect(body_part,  
complaint) ON DELETE CASCADE ON UPDATE CASCADE  
);
```

```

CREATE TABLE VaccineHasSideEffect(
    vaccine_name CHAR(25),
    body_part CHAR(40),
    complaint CHAR(50),
    PRIMARY KEY (vaccine_name, body_part, complaint),
    FOREIGN KEY (vaccine_name) REFERENCES Vaccine(name) ON DELETE CASCADE ON
UPDATE CASCADE,
    FOREIGN KEY (body_part, complaint) REFERENCES SideEffect(body_part,
complaint) ON DELETE CASCADE ON UPDATE CASCADE
);

CREATE TABLE VaccineRecieverGetsShotVaccine(
    receiver_phn BIGINT,
    vaccine_name CHAR(50),
    shot_time DATETIME,
    healthWorker_phn BIGINT NOT NULL,
    appointment_id INTEGER NOT NULL,
    center_id INTEGER NOT NULL,
    PRIMARY KEY (receiver_phn, vaccine_name, shot_time),
    FOREIGN KEY (receiver_phn) REFERENCES VaccineReceiver(phn) ON DELETE NO
ACTION ON UPDATE CASCADE,
    FOREIGN KEY (vaccine_name) REFERENCES Vaccine(name) ON DELETE NO ACTION ON
UPDATE CASCADE,
    FOREIGN KEY (appointment_id, center_id) REFERENCES
VaccinationAppointment(appointment_id, center_id) ON DELETE NO ACTION ON UPDATE
NO ACTION,
    FOREIGN KEY (healthWorker_phn) REFERENCES HealthWorker(phn) ON DELETE NO
ACTION ON UPDATE CASCADE
);

CREATE TABLE VaccinationCenterInventoriesVaccine(
    center_id INTEGER,
    vaccine_name CHAR(25),
    amount INTEGER,
    PRIMARY KEY (center_id, vaccine_name),
    FOREIGN KEY (center_id) REFERENCES VaccinationCenter(center_id) ON DELETE
CASCADE ON UPDATE CASCADE,
    FOREIGN KEY (vaccine_name) REFERENCES Vaccine(name) ON DELETE NO ACTION ON
UPDATE CASCADE
)

```

2. SIDE EFFECT HAPPENED TO VACCINE RECEIVER

```
INSERT INTO SideEffectHappenedToVaccineReceiver(receiver_phn, body_part,
complaint, date_of_complaint)
VALUES (7887737737, "head", "stroke", "2021-04-12");

INSERT INTO SideEffectHappenedToVaccineReceiver(receiver_phn, body_part,
complaint, date_of_complaint)
VALUES (9338621983, "arm", "armache", "2021-08-24");

INSERT INTO SideEffectHappenedToVaccineReceiver(receiver_phn, body_part,
complaint, date_of_complaint)
VALUES (1239633877, "heart", "heart attack", "2021-11-18");

INSERT INTO SideEffectHappenedToVaccineReceiver(receiver_phn, body_part,
complaint, date_of_complaint)
VALUES (6363822534, "lung", "blood clot", "2021-12-09");

INSERT INTO SideEffectHappenedToVaccineReceiver(receiver_phn, body_part,
complaint, date_of_complaint)
VALUES (5238222152, "arm", "armache", "2021-12-27");
```

3. SIDE EFFECT

```
INSERT INTO SideEffect(body_part, complaint)
VALUES ("head", "stroke");

INSERT INTO SideEffect(body_part, complaint)
VALUES ("arm", "armache");

INSERT INTO SideEffect(body_part, complaint)
VALUES ("heart", "heart attack");

INSERT INTO SideEffect(body_part, complaint)
VALUES ("lung", "blood clot");

INSERT INTO SideEffect(body_part, complaint)
VALUES ("arm", "swollen");
```

4. VACCINATION APPOINTMENT

```
INSERT INTO VaccinationAppointment(appointment_id, center_id, date, center_name,
current, receiver_phn)
```

```
VALUES (1, 1, "2021-04-12 13:12:00", "camche", 1, 7887737737);

INSERT INTO VaccinationAppointment(appointment_id, center_id, date, center_name,
current, receiver_phn)
VALUES (2, 1, "2021-04-12 14:12:00", "camche", 0, 7887737737);

INSERT INTO VaccinationAppointment(appointment_id, center_id, date, center_name,
current, receiver_phn)
VALUES (3, 2, "2021-09-02 15:00:00", "bc place", 1, 6363822534);

INSERT INTO VaccinationAppointment(appointment_id, center_id, date, center_name,
current, receiver_phn)
VALUES (4, 5, "2021-02-24 12:00:00", "staples center", 1, 5238222152);

INSERT INTO VaccinationAppointment(appointment_id, center_id, date, center_name,
current, receiver_phn)
VALUES (5, 3, "2021-08-06 10:38:00", "oracle arena", 1, 9338621983);
```

5.HEALTH WORKER

```
INSERT INTO HealthWorker(phn, name, email)
VALUES (1887737737, "Susan Milheimer", "susan.milheimer@nasa.com");

INSERT INTO HealthWorker(phn, name, email)
VALUES (7338621983, "John", "john@gmail.com");

INSERT INTO HealthWorker(phn, name, email)
VALUES (9239633877, "Tyler Egg", "tyler.egg@gmail.com");

INSERT INTO HealthWorker(phn, name, email)
VALUES (5363822534, "Heather Mer", "evilslayer99@hotmail.com");

INSERT INTO HealthWorker(phn, name, email)
VALUES (6238222152, "Peter Geoff", "geoff.peter@gmail.com");
```

6.VACCINATIONCENTERINVENTORIESVACCINE

```
INSERT INTO VaccinationCenterInventoriesVaccine(center_id, vaccine_name, amount)
VALUES (1, "comirnaty", 60);

INSERT INTO VaccinationCenterInventoriesVaccine(center_id, vaccine_name, amount)
VALUES (2, "janssen", 100);

INSERT INTO VaccinationCenterInventoriesVaccine(center_id, vaccine_name, amount)
```

```
VALUES (3, "merck", 1500);

INSERT INTO VaccinationCenterInventoriesVaccine(center_id, vaccine_name, amount)
VALUES (4, "spikevax", 5);

INSERT INTO VaccinationCenterInventoriesVaccine(center_id, vaccine_name, amount)
VALUES (5, "vaxzevria", 24);
```

7.VACCINATION CENTER

```
INSERT INTO VaccinationCenter(center_id, name, address, postal_code, state)
VALUES (1, "telus center", "2105 57th Ave", "V6C 9A2", "BC");

INSERT INTO VaccinationCenter(center_id, name, address, postal_code, state)
VALUES (2, "bc place", "240 25th Ave", "V6G 7B8", "BC");

INSERT INTO VaccinationCenter(center_id, name, address, postal_code, state)
VALUES (3, "oracle arena", "457 20th Ave", "V6J 5C4", "BC");

INSERT INTO VaccinationCenter(center_id, name, address, postal_code, state)
VALUES (4, "vancouver general hospital", "152 2nd Street", "V6C 6S7", "BC");

INSERT INTO VaccinationCenter(center_id, name, address, postal_code, state)
VALUES (5, "staples center", "686 4th Street", "V6K 1X1", "BC");
```

8.VACCINEMANUFACTURER

```
INSERT INTO VaccineManufacturer (manufacturer_name, production_volume,
production_rate)
VALUES ("veler", 100000, 1000);

INSERT INTO VaccineManufacturer (manufacturer_name, production_volume,
production_rate)
VALUES ("pontel", 15000, 800);

INSERT INTO VaccineManufacturer (manufacturer_name, production_volume,
production_rate)
VALUES ("haxola", 16000, 900);

INSERT INTO VaccineManufacturer (manufacturer_name, production_volume,
production_rate)
VALUES ("dartis", 30000, 500);
```

```
INSERT INTO VaccineManufacturer (manufacturer_name, production_volume,  
production_rate)  
VALUES ("camche", 40000, 600);
```

9.VACCINEHASIDEFFECT

```
INSERT INTO VaccineHasSideEffect(vaccine_name, body_part, complaint)  
VALUES ("comirnaty", "head", "stroke");  
  
INSERT INTO VaccineHasSideEffect(vaccine_name, body_part, complaint)  
VALUES ("merck", "arm", "armache");  
  
INSERT INTO VaccineHasSideEffect(vaccine_name, body_part, complaint)  
VALUES ("spikevax", "heart", "heart attack");  
  
INSERT INTO VaccineHasSideEffect(vaccine_name, body_part, complaint)  
VALUES ("janssen", "lung", "blood clot");  
  
INSERT INTO VaccineHasSideEffect(vaccine_name, body_part, complaint)  
VALUES ("vaxzevria", "arm", "armache");
```

10 VACCINE

```
INSERT INTO Vaccine(name, vaccine_type, number_of_shots, cooldown_days,  
manufacturer_name)  
VALUES ("comirnaty", "mrna", 3, 20, "veler");  
  
INSERT INTO Vaccine(name, vaccine_type, number_of_shots, cooldown_days,  
manufacturer_name)  
VALUES ("merck", "mrna", 1, 36, "pontel");  
  
INSERT INTO Vaccine(name, vaccine_type, number_of_shots, cooldown_days,  
manufacturer_name)  
VALUES ("spikevax", "mrna", 2, 53, "haxola");  
  
INSERT INTO Vaccine(name, vaccine_type, number_of_shots, cooldown_days,  
manufacturer_name)  
VALUES ("janssen", "adenovirus vector", 1, 60, "camche");  
  
INSERT INTO Vaccine(name, vaccine_type, number_of_shots, cooldown_days,  
manufacturer_name)  
VALUES ("vaxzevria", "adenovirus vector", 2, 45, "dartis");
```

11.VACCINEORDER

```
INSERT INTO VaccineOrder(order_id, manufacturer_name, center_id, order_amount,
order_date)
VALUES (100, "camche", 1, 500, "2021-05-18 13:00:00");

INSERT INTO VaccineOrder(order_id, manufacturer_name, center_id, order_amount,
order_date)
VALUES (102, "dartis", 2, 300, "2021-04-06 07:00:00");

INSERT INTO VaccineOrder(order_id, manufacturer_name, center_id, order_amount,
order_date)
VALUES (103, "haxola", 3, 250, "2021-01-31 20:00:00");

INSERT INTO VaccineOrder(order_id, manufacturer_name, center_id, order_amount,
order_date)
VALUES (100, "pontel", 2, 400, "2021-08-01 07:00:00");

INSERT INTO VaccineOrder(order_id, manufacturer_name, center_id, order_amount,
order_date)
VALUES (105, "veler", 5, 350, "2021-09-21 06:00:00");
```

12.VACCINERECEIVER

```
INSERT INTO VaccineReceiver(phn, name, email, phone_number, date_of_birth,
postal_code)
VALUES (7887737737, "Susan Neige", "susanneige@gmail.com", 6043692375, "1997-04-
12", "V6X 1X1");

INSERT INTO VaccineReceiver(phn, name, email, phone_number, date_of_birth,
postal_code)
VALUES (9338621983, "John Brown", "johnbrown@hotmail.com", 7785362894, "1982-01-
04", "V6C 6S7");

INSERT INTO VaccineReceiver(phn, name, email, phone_number, date_of_birth,
postal_code)
VALUES (1239633877, "Tyler Johnson", "tyler0101@tylerjohnson.com", 7782426283,
"2001-01-01", "V6J 5C4");

INSERT INTO VaccineReceiver(phn, name, email, phone_number, date_of_birth,
postal_code)
VALUES (6363822534, "Heather Heatherson", "heather@gmail.com", 6042628282, "1955-
11-24", "V6G 7B8");
```



```
INSERT INTO VaccineReceiver(phn, name, email, phone_number, date_of_birth, postal_code)
VALUES (5238222152, "Peter Kae", "peter.kae@gmail.com", 4037847382, "1988-04-26", "V6C 9A2");
```

13 VACCINERECEIVERGETSSHOTVACCINE

```
INSERT INTO VaccineRecieverGetsShotVaccine(receiver_phn, vaccine_name, shot_time, healthWorker_phn, appointment_id, center_id)
VALUES (9338621983, "comirnaty", "2021-04-12 13:13:00", 1887737737, 1, 1);

INSERT INTO VaccineRecieverGetsShotVaccine(receiver_phn, vaccine_name, shot_time, healthWorker_phn, appointment_id, center_id)
VALUES (7887737737, "janssen", "2021-04-12 14:15:00", 5363822534, 2, 1);

INSERT INTO VaccineRecieverGetsShotVaccine(receiver_phn, vaccine_name, shot_time, healthWorker_phn, appointment_id, center_id)
VALUES (6363822534, "merck", "2021-09-02 15:03:00", 6238222152, 3, 2);

INSERT INTO VaccineRecieverGetsShotVaccine(receiver_phn, vaccine_name, shot_time, healthWorker_phn, appointment_id, center_id)
VALUES (5238222152, "spikevax", "2021-02-24 12:04:00", 7338621983, 4, 5);

INSERT INTO VaccineRecieverGetsShotVaccine(receiver_phn, vaccine_name, shot_time, healthWorker_phn, appointment_id, center_id)
VALUES (1239633877, "vaxzevria", "2021-08-06 10:49:00", 9239633877, 5, 3);
```