

COMP421 Project 3

Relational Translation (the Project 1 solution posted on MyCourses)

1. Category(cname , prioritynum)
2. Person(hinsurnum, name, gender, dob, phone, city, postalcd, streetaddr, regdate, cname)
cname references Category
3. Vaccine(vname , waitperiod, doses)
4. VaccLocation(locname, lcity, lpostalcode, lstreetaddr)
5. VaccineBatch(vname, batchno, mfgdate, expydate, numdoses, locname) vname references Vaccine, locname references VaccLocation
6. Vial(vname, batchno, vialid) vname,batchno references VaccineBatch
7. Hospital(locname) locname references VaccLocation
8. Nurse(licensenum, name, locname) locname references Hospital
9. VaccDates(locname, vdate) locname references VaccLocation
10. VaccSlot(locname, vdate, vtime, vslot, hinsurnum, asgndate, licensenum, vname, batchno, vialid) locname,vdate references VaccDates, licensenum references Nurse, hinsurnum references Person, (vname, batchno, vialid) references Vial
11. NurseAssignments(licensenum, locname, vdate) licensenum references Nurse, (locname, vdate) references VaccDates

Application Interaction

a).

```
than6@winter2021-comp421[08:48:55]:p2$ db2 -t -v < p3a1.sql
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Command Line Processor for DB2 Client 11.5.4.0

You can issue database manager commands and SQL statements from the command
prompt. For example:
    db2 => connect to sample
    db2 => bind sample.bnd

For general help, type: ?.
For command help, type: ? command, where command can be
the first few keywords of a database manager command. For example:
? CATALOG DATABASE for help on the CATALOG DATABASE command
? CATALOG           for help on all of the CATALOG commands.

To exit db2 interactive mode, type QUIT at the command prompt. Outside
interactive mode, all commands must be prefixed with 'db2'.
To list the current command option settings, type LIST COMMAND OPTIONS.

For more detailed help, refer to the Online Reference Manual.

db2 => CONNECT TO cs421

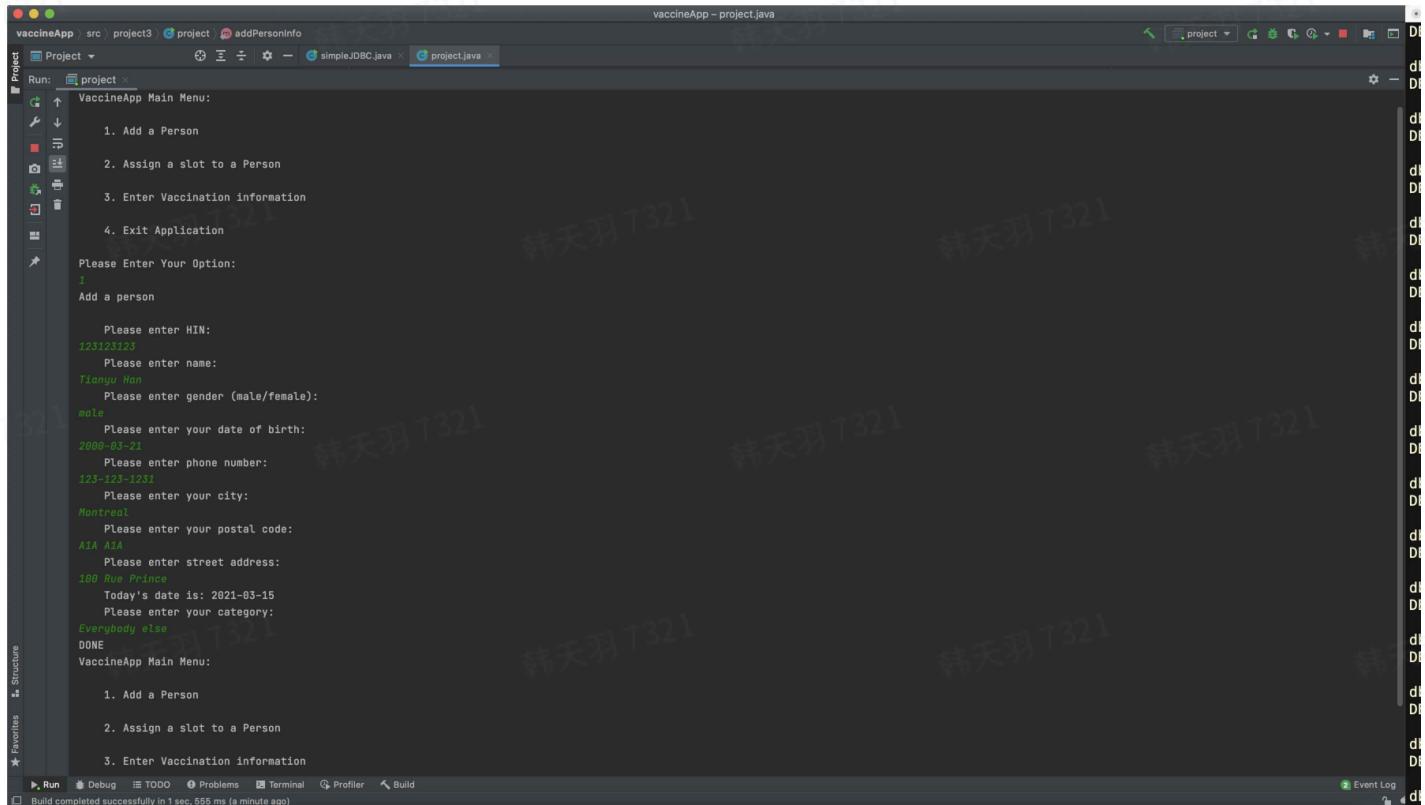
    Database Connection Information

Database server      = DB2/LINUXX8664 11.5.4.0
SQL authorization ID = THAN6
Local database alias = CS421

db2 => SELECT * FROM Person WHERE hinsurnum=123123123

HINSURNUM      NAME          GENDER        DOB        P
REGDATE      CNAME
-----
-----
```

a1



a2

```

admin -- ssh than6@winter2021-comp421.cs.mcgill.ca -- 174x45
db2 => than6@winter2021-comp421[08:49:04]:p2$ db2 -t -v < p3a1.sql
(c) Copyright IBM Corporation 1993,2007
Command Line Processor for DB2 Client 11.5.4.0

You can issue database manager commands and SQL statements from the command
prompt. For example:
  db2 => connect to sample
  db2 => bind sample.bnd

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db2 => CONNECT TO cs421

Database Connection Information

Database server      = DB2/LINUXX8664 11.5.4.0
SQL authorization ID = THAN6
Local database alias = CS421

db2 => SELECT * FROM Person WHERE hinsurnum=123123123

HINSRNUM NAME           GENDER      DOB        PHONE      CITY          POSTALCD STREETADDR
REGDATE   CNAME
-----  -----
123123123 Tianyu Han    male       03/21/2000 123-123-1231 Montreal      A1A A1A  100 Rue Prince
03/15/2021 Everybody else

1 record(s) selected.

than6@winter2021-comp421[08:55:39]:p2$ 

```

a3

```

vaccineApp - project.java
Project  src  project3  project  updatePerson
Run: project x
VaccineApp Main Menu:
1. Add a Person
2. Assign a slot to a Person
3. Enter Vaccination information
4. Exit Application

Please Enter Your Option:
1
Add a person

Please enter HIN:
123123123
The person already exists. Do you want to update your info? (yes/no)
yes
Please enter name:
Tianyu Han
Please enter gender (male/female):
male
Please enter your date of birth:
2000-03-21
Please enter phone number:
222-222-2222
Please enter your city:
Montreal
Please enter your postal code:
A1A A1A
Please enter street address:
100 Rue Prince
Today's date is: 2021-03-15
Please enter your category:
Everybody else
DONE
VaccineApp Main Menu:

1. Add a Person
2. Assign a slot to a Person

```

a4

```

db2 => than6@winter2021-comp421[09:05:02]:p2$ db2 -t -v < p3a1.sql
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Command Line Processor for DB2 Client 11.5.4.0

You can issue database manager commands and SQL statements from the command
prompt. For example:
  db2 => connect to sample
  db2 => bind sample.bnd

For general help, type: ?.
For command help, type: ? command, where command can be
the first few keywords of a database manager command. For example:
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To list the current command option settings, type LIST COMMAND OPTIONS.

For more detailed help, refer to the Online Reference Manual.

db2 => CONNECT TO cs421

Database Connection Information

Database server      = DB2/LINUXX8664 11.5.4.0
SQL authorization ID = THAN6
Local database alias = CS421

db2 => SELECT * FROM Person WHERE hinsurnum=123123123

HINSUMERNAME  NAME           GENDER      DOB        PHONE      CITY          POSTALCD STREETADDR
REGDATE       CNAME
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
123123123   Tianyu Han     male        03/21/2000 222-222-2222 Montreal    A1A A1A 100 Rue Prince
03/15/2021   Everybody else

1 record(s) selected.

db2 => than6@winter2021-comp421[09:06:20]:p2$ |

```

a5

b).

```

db2 => than6@winter2021-comp421[09:17:29]:p2$ vi p3b1.sql
than6@winter2021-comp421[09:17:57]:p2$ db2 -t -v < p3b1.sql
(c) Copyright IBM Corporation 1993,2007
Command Line Processor for DB2 Client 11.5.4.0

You can issue database manager commands and SQL statements from the command
prompt. For example:
  db2 => connect to sample
  db2 => bind sample.bnd

For general help, type: ?.
For command help, type: ? command, where command can be
the first few keywords of a database manager command. For example:
? CATALOG DATABASE for help on the CATALOG DATABASE command
? CATALOG          for help on all of the CATALOG commands.

To exit db2 interactive mode, type QUIT at the command prompt. Outside
interactive mode, all commands must be prefixed with 'db2'.
To list the current command option settings, type LIST COMMAND OPTIONS.

For more detailed help, refer to the Online Reference Manual.

db2 => CONNECT TO cs421

Database Connection Information

Database server      = DB2/LINUXX8664 11.5.4.0
SQL authorization ID = THAN6
Local database alias = CS421

db2 => db2 (cont.) => SELECT * FROM Person WHERE NOT EXISTS( SELECT hinsurnum FROM VaccSlot WHERE
E VaccSlot.hinsurnum=Person.hinsurnum ) LIMIT 1

HINSUMERNAME  NAME           GENDER      DOB        PHONE      CITY          POSTALCD STREETADDR
REGDATE       CNAME
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
219956390   James M Chang   male        10/07/1983 819-827-0679 Montreal    J0X 1N0 993 rue des Églises Est
01/08/2021   Everybody else

1 record(s) selected.

than6@winter2021-comp421[09:18:00]:p2$ |

```

b1

VaccineApp Main Menu:

1. Add a Person
2. Assign a slot to a Person
3. Enter Vaccination information
4. Exit Application

Please Enter Your Option:

Assign a slot

Please enter HIN:

219956390

Do you want to be assigned a slot 1).randomly or 2).based on the info you give? (Please enter 1 or 2).

1

This is your first dose.

DONE

b2

```
than6@winter2021-comp421[09:18:00]:p2$ vi p3b3.sql
than6@winter2021-comp421[09:20:25]:p2$ db2 -t -v < p3b3.sql
(c) Copyright IBM Corporation 1993,2007
Command Line Processor for DB2 Client 11.5.4.0

You can issue database manager commands and SQL statements from the command
prompt. For example:
  db2 => connect to sample
  db2 => bind sample.bnd
```

```
For general help, type: ?.
For command help, type: ? command, where command can be
the first few keywords of a database manager command. For example:
  ? CATALOG DATABASE for help on the CATALOG DATABASE command
  ? CATALOG          for help on all of the CATALOG commands.
```

```
To exit db2 interactive mode, type QUIT at the command prompt. Outside
interactive mode, all commands must be prefixed with 'db2'.
To list the current command option settings, type LIST COMMAND OPTIONS.
```

```
For more detailed help, refer to the Online Reference Manual.
```

```
db2 => CONNECT TO cs421
```

Database Connection Information

```
Database server      = DB2/LINUXX8664 11.5.4.0
SQL authorization ID = THAN6
Local database alias = CS421
```

```
db2 => db2 (cont.) => db2 (cont.) => SELECT * FROM VaccSlot WHERE hinsurnum=219956390
```

LOCNAME	VDATE	VTIME	VSLOT	HINSURNUM	ASGNDATE	LICENSENUM	VNAME	BATCHNO	VIALID
Jewish General	03/20/2021	15:32:00	JG002	219956390	03/15/2021	--		-	-

1 record(s) selected.

b3

VaccineApp Main Menu:

1. Add a Person
2. Assign a slot to a Person
3. Enter Vaccination information
4. Exit Application

Please Enter Your Option:

2
Assign a slot

Please enter HIN:
406215947

Do you want to be assigned a slot 1).randomly or 2).based on the info you give? (Please enter 1 or 2).
2

Please enter the slot id you'd like to be assigned.
JG002

Please enter the date you'd like to be assigned.
2021-03-20

Please enter the time you'd like to be assigned.
15:32

The slot you have chosen is not available on that day.

b4

```
than6@winter2021-comp421[09:26:11]:p2$ db2 -t -v < p3b4.sql
(c) Copyright IBM Corporation 1993,2007
Command Line Processor for DB2 Client 11.5.4.0

You can issue database manager commands and SQL statements from the command
prompt. For example:
  db2 => connect to sample
  db2 => bind sample.bnd

For general help, type: ?.
For command help, type: ? command, where command can be
the first few keywords of a database manager command. For example:
  ? CATALOG DATABASE for help on the CATALOG DATABASE command
  ? CATALOG      for help on all of the CATALOG commands.

To exit db2 interactive mode, type QUIT at the command prompt. Outside
interactive mode, all commands must be prefixed with 'db2'.
To list the current command option settings, type LIST COMMAND OPTIONS.

For more detailed help, refer to the Online Reference Manual.

db2 => CONNECT TO cs421

  Database Connection Information

  Database server      = DB2/LINUXX8664 11.5.4.0
  SQL authorization ID = THAN6
  Local database alias = CS421

db2 => db2 (cont.) => SELECT * FROM VaccSlot WHERE vslot='JG002' AND vdate='2021-03-20'
' AND vtime='15:32' UNION (SELECT * FROM VaccSlot WHERE hinsurnum=406215947)

  LOCNAME          VDATE    VTIME   VSLOT      HINSURNUM  ASGNDATE  LICENSENUM  VNAME        BATCHNO  VIALID
  Jewish General  03/20/2021 15:32:00 JG002       219956390 03/15/2021      --         -
  1 record(s) selected.
```

b5

c).

```
than6@winter2021-comp421[09:35:18]:p2$ db2 -t -v < p3c1.sql
(c) Copyright IBM Corporation 1993,2007
Command Line Processor for DB2 Client 11.5.4.0
```

You can issue database manager commands and SQL statements from the command prompt. For example:

```
db2 => connect to sample
db2 => bind sample.bnd
```

For general help, type: ?.

For command help, type: ? command, where command can be
the first few keywords of a database manager command. For example:
? CATALOG DATABASE for help on the CATALOG DATABASE command
? CATALOG for help on all of the CATALOG commands.

To exit db2 interactive mode, type QUIT at the command prompt. Outside
interactive mode, all commands must be prefixed with 'db2'.

To list the current command option settings, type LIST COMMAND OPTIONS.

For more detailed help, refer to the Online Reference Manual.

```
db2 => CONNECT TO cs421
```

Database Connection Information

```
Database server      = DB2/LINUXX8664 11.5.4.0
SQL authorization ID = THAN6
Local database alias = CS421
```

```
db2 => db2 (cont.) => db2 (cont.) => SELECT doses FROM Vaccine WHERE vname='Moderna'
```

DOSES

```
-----  
2
```

```
1 record(s) selected.
```

c1

```
than6@winter2021-comp421[09:38:12]:p2$ db2 -t -v < p3c2.sql
(c) Copyright IBM Corporation 1993,2007
Command Line Processor for DB2 Client 11.5.4.0

You can issue database manager commands and SQL statements from the command
prompt. For example:
  db2 => connect to sample
  db2 => bind sample.bnd

For general help, type ?.
For command help, type: ? command, where command can be
the first few keywords of a database manager command. For example:
  ? CATALOG DATABASE for help on the CATALOG DATABASE command
  ? CATALOG          for help on all of the CATALOG commands.

To exit db2 interactive mode, type QUIT at the command prompt. Outside
interactive mode, all commands must be prefixed with 'db2'.
To list the current command option settings, type LIST COMMAND OPTIONS.

For more detailed help, refer to the Online Reference Manual.

db2 => CONNECT TO cs421

  Database Connection Information

  Database server      = DB2/LINUXX8664 11.5.4.0
  SQL authorization ID = THAN6
  Local database alias = CS421

db2 => db2 (cont.) => db2 (cont.) => SELECT count(*) AS doses_have_received FROM VaccSlot WHERE hinsurnum=360583785 AND licensenum IS NOT NULL
DOSES_HAVE_RECEIVED
-----
  2
1 record(s) selected.
```

c2

```
VaccineApp Main Menu:

 1. Add a Person

 2. Assign a slot to a Person

 3. Enter Vaccination information

 4. Exit Application

Please Enter Your Option:
2
Assign a slot

Please enter HIN:
360583785
Do you want to be assigned a slot 1).randomly or 2).based on the info you give? (Please enter 1 or 2).
2
Please enter the slot id you'd like to be assigned.
N1001
Please enter the date you'd like to be assigned.
2021-03-22
Please enter the time you'd like to be assigned.
10:00
You have received the required number of shots. No need to get a slot.
```

c3

```

than6@winter2021-comp421[09:42:34]:p2$ db2 -t -v < p3c4.sql
(c) Copyright IBM Corporation 1993,2007
Command Line Processor for DB2 Client 11.5.4.0

You can issue database manager commands and SQL statements from the command
prompt. For example:
  db2 => connect to sample
  db2 => bind sample.bnd

For general help, type: ?
For command help, type: ? command, where command can be
the first few keywords of a database manager command. For example:
  ? CATALOG DATABASE for help on the CATALOG DATABASE command
  ? CATALOG          for help on all of the CATALOG commands.

To exit db2 interactive mode, type QUIT at the command prompt. Outside
interactive mode, all commands must be prefixed with 'db2'.
To list the current command option settings, type LIST COMMAND OPTIONS.

For more detailed help, refer to the Online Reference Manual.

db2 => CONNECT TO cs421

Database Connection Information

Database server      = DB2/LINUXX8664 11.5.4.0
SQL authorization ID = THAN6
Local database alias  = CS421

db2 => db2 (cont.) => db2 (cont.) => SELECT * FROM VaccSlot WHERE vslot='N1001' AND vdate='2021-03-22' AND vtime='10:00'

LOCNAME      VDATE    VTIME   VSLOT      HINSRNUM  ASGNDATE  LICENSENUM  VNAME      BATCHNO  VIALID
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
NewLoc1    03/22/2021 10:00:00 N1001  --        --        --        --        --        --        --
1 record(s) selected.

```

c4

d).

(For the first question, we have to first assign a slot to this person before entering their associated vaccine information. Since I decided to assign this slot randomly, I have to first get the slot information by a query.)

```

VaccineApp Main Menu:

1. Add a Person
2. Assign a slot to a Person
3. Enter Vaccination information
4. Exit Application

Please Enter Your Option:
2
Assign a slot

Please enter HIN:
123123123
Do you want to be assigned a slot 1).randomly or 2).based on the info you give? (Please enter 1 or 2).
1
This is your first dose.
DONE

```

d1_1

```
db2 => db2 (cont.) => db2 (cont.) => SELECT locname, vdate, vtime, vslot FROM VaccSlot WHERE hinsurnum=123123123
LOCNAME          VDATE      VTIME     VSLOT
-----          -----      -----    -----
Jewish General   03/20/2021 16:59:00 JG001
1 record(s) selected.
```

d1_2

- 1. Add a Person
- 2. Assign a slot to a Person
- 3. Enter Vaccination information
- 4. Exit Application

Please Enter Your Option:

3
Enter Vaccine Information

Please enter HIN:

123123123

Your vaccine brand is: (blank if you haven't got any vaccine before.)

Please enter location:

Jewish General

Please enter vdate:

2021-03-20

Please enter vtime:

16:59

Please enter slot id:

JG001

Available nurses are listed here. Please choose one.

118836246

292516754

465045003

520757162

689864957

701108441

292516754

Please enter vname:

Moderna

Available batches adjusted by your past vaccination condition are listed here. Please choose one.

16

16

Please enter the vial id:

16002

DONE

DONE

d1_3

```

than6@winter2021-comp421[09:50:31]:p2$ db2 -t -v < p3d2.sql
(c) Copyright IBM Corporation 1993,2007
Command Line Processor for DB2 Client 11.5.4.0

You can issue database manager commands and SQL statements from the command
prompt. For example:
  db2 => connect to sample
  db2 => bind sample.bnd

For general help, type: ?.
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interactive mode, all commands must be prefixed with 'db2'.
To list the current command option settings, type LIST COMMAND OPTIONS.

For more detailed help, refer to the Online Reference Manual.

db2 => CONNECT TO cs421

  Database Connection Information

Database server      = DB2/LINUXX8664 11.5.4.0
SQL authorization ID = THAN6
Local database alias  = CS421

db2 => db2 (cont.) => db2 (cont.) => SELECT * FROM VaccSlot WHERE hinsurnum=123123123 AND vialid=16002
LOCNAME           VDATE      VTIME    VSLOT      HINSURNUM   ASGNDATE   LICENSENUM  VNAME      BATCHNO     VIALID
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
Jewish General    03/20/2021 16:59:00 JG001     123123123 03/15/2021 292516754 Moderna
                                                               16          16002

1 record(s) selected.

```

d2

e).

(For the third question, since I decided to assign this slot randomly, I have to first get the slot information by a query.)

```

than6@winter2021-comp421[08:48:03]:p2$ db2 -t -v < p3e1.sql
(c) Copyright IBM Corporation 1993,2007
Command Line Processor for DB2 Client 11.5.4.0

You can issue database manager commands and SQL statements from the command
prompt. For example:
  db2 => connect to sample
  db2 => bind sample.bnd

For general help, type: ?.
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db2 => CONNECT TO cs421

  Database Connection Information

Database server      = DB2/LINUXX8664 11.5.4.0
SQL authorization ID = THAN6
Local database alias  = CS421

db2 => db2 (cont.) => db2 (cont.) => db2 (cont.) => db2 (cont.) => SELECT * FROM VaccSlot WHERE vname='Moderna' AND licensenum IS NO
T NULL AND hinsurnum IN (SELECT hinsurnum FROM VaccSlot GROUP BY hinsurnum HAVING count(hinsurnum)=1) LIMIT 1
LOCNAME           VDATE      VTIME    VSLOT      HINSURNUM   ASGNDATE   LICENSENUM  VNAME      BATCHNO     VIALID
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
location 1        02/25/2021 11:57:00 L1001     784343162 02/24/2021 717627640 Moderna
                                                               2          2001

1 record(s) selected.

```

e1

VaccineApp Main Menu:

1. Add a Person
 2. Assign a slot to a Person
 3. Enter Vaccination information
 4. Exit Application

Please Enter Your Option:

2 Assign a slot

Please enter HIN:

784343162

e2

```
than6@winter2021-comp421[08:50:36]:~$ db2 -t -v < p3e3.sql
(c) Copyright IBM Corporation 1993,2007
Command Line Processor for DB2 Client 11.5.4.0

You can issue database manager commands and SQL statements from the command
prompt. For example:
  db2 => connect to sample
  db2 => bind sample.bnd

For general help, type: ?.
For command help, type: ? command, where command can be
the first few keywords of a database manager command. For example:
  ? CATALOG DATABASE for help on the CATALOG DATABASE command
  ? CATALOG           for help on all of the CATALOG commands.

To exit db2 interactive mode, type QUIT at the command prompt. Outside
interactive mode, all commands must be prefixed with 'db2'.
To list the current command option settings, type LIST COMMAND OPTIONS.

For more detailed help, refer to the Online Reference Manual.

db2 => CONNECT TO cs421

  Database Connection Information

Database server      = DB2/LINUXX8664 11.5.4.0
SQL authorization ID = THAN6
Local database alias = CS421

db2 => db2 (cont.) => db2 (cont.) => SELECT * FROM VaccSlot WHERE hinsurnum=784343162

  LOCONAME          VDATE       VTIME     VSLOT      HINSRNUM   ASGNDATE    LICENSENUM  VNAME          BATCHNO    VIALID
  location 1        02/25/2021 11:57:00  L1001      784343162 02/24/2021  717627640 Moderna          2         2001
  NewLoc1          03/22/2021 11:00:00  N1002      784343162 03/16/2021      -          -          -
  2 record(s) selected.
```

e3_1

VaccineApp Main Menu:

1. Add a Person

2. Assign a slot to a Person

3. Enter Vaccination information

4. Exit Application

Please Enter Your Option:

3

Enter Vaccine Information

Please enter HIN:

784343162

Your vaccine brand is: Moderna (blank if you haven't got any vaccine before.)|

Please enter location:

NewLoc1

Please enter vdate:

2021-03-22

Please enter vtime:

11:00

Please enter slot id:

N1002

Available nurses are listed here. Please choose one.

300672508

465045003

490083227

689864957

701108441

300672508

Please enter vname:

BBB

The name you have entered is not the same as your last vaccine name. Please try again.

CCC

The name you have entered is not the same as your last vaccine name. Please try again.

DDD

The name you have entered is not the same as your last vaccine name. Please try again.

e3_2

Indexing

```
[than6@winter2021-comp421[10:11:42]:p2$ db2 -t -v < p3q3.sql  
(c) Copyright IBM Corporation 1993,2007  
Command Line Processor for DB2 Client 11.5.4.0
```

You can issue database manager commands and SQL statements from the command prompt. For example:

```
db2 => connect to sample  
db2 => bind sample.bnd
```

For general help, type: ?.

For command help, type: ? command, where command can be the first few keywords of a database manager command. For example:

```
? CATALOG DATABASE for help on the CATALOG DATABASE command  
? CATALOG for help on all of the CATALOG commands.
```

To exit db2 interactive mode, type QUIT at the command prompt. Outside interactive mode, all commands must be prefixed with 'db2'.

To list the current command option settings, type LIST COMMAND OPTIONS.

For more detailed help, refer to the Online Reference Manual.

```
db2 => CONNECT TO cs421
```

Database Connection Information

```
Database server      = DB2/LINUXX8664 11.5.4.0  
SQL authorization ID = THAN6  
Local database alias = CS421
```

```
db2 => CREATE UNIQUE INDEX phone_index ON Person(phone) INCLUDE (streetaddr)  
DB20000I  The SQL command completed successfully.
```

I think in real world, searching by the insurance number of a person is more practical/efficient.

Since in real world, there are possibly hundreds of millions of records in our database, and it's reasonable to assume that many of them need to change their phone numbers sometime, which might lead to a change in the indexes. It's not stable. And if we create unique index on phone numbers, we have to make sure that everyone's phone number is different from other people's record in our database, which will for sure lead to a pain since it's very possible that two people might have entered the same phone number (for example, a child might not have their own phone number so they have to use their parent's when registering). Besides, it's quite possible that someone doesn't even own a phone. But everyone for sure has a health insurance number.

Therefore, it's not a good idea to search by phone number.

Data Analytics

```
than6@winter2021-comp421[08:59:39]:p2$ db2 -t -v < p3q4.sql
(c) Copyright IBM Corporation 1993,2007
Command Line Processor for DB2 Client 11.5.4.0

You can issue database manager commands and SQL statements from the command
prompt. For example:
  db2 => connect to sample
  db2 => bind sample.bnd

For general help, type: ?.
For command help, type: ? command, where command can be
the first few keywords of a database manager command. For example:
  ? CATALOG DATABASE for help on the CATALOG DATABASE command
  ? CATALOG           for help on all of the CATALOG commands.

To exit db2 interactive mode, type QUIT at the command prompt. Outside
interactive mode, all commands must be prefixed with 'db2'.
To list the current command option settings, type LIST COMMAND OPTIONS.

For more detailed help, refer to the Online Reference Manual.

db2 => CONNECT TO cs421

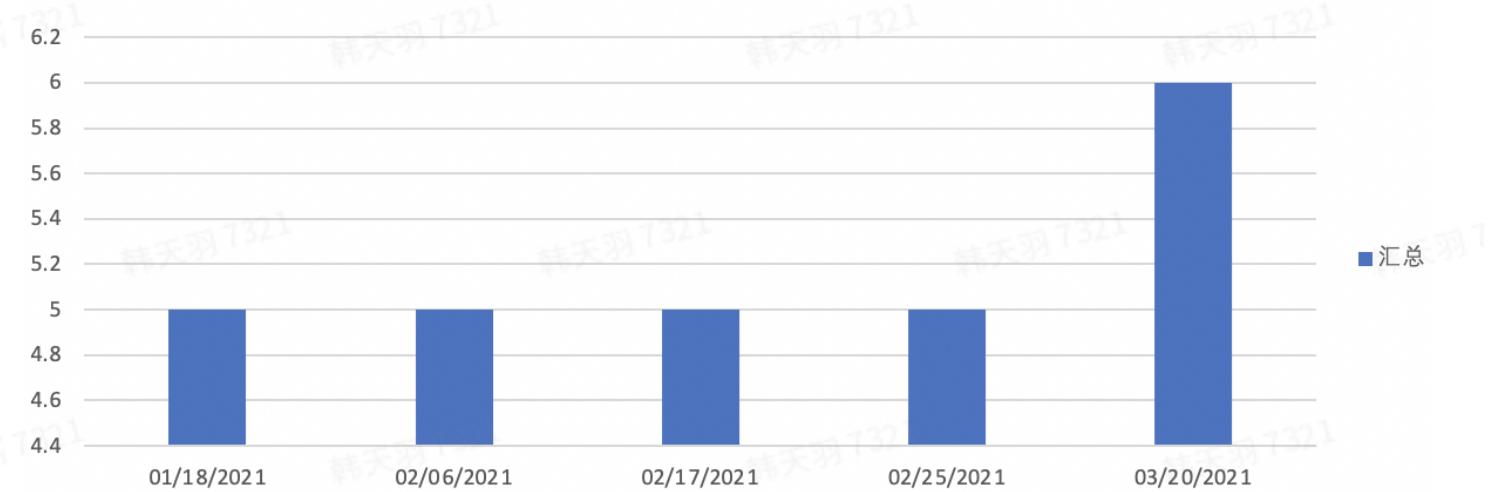
  Database Connection Information

  Database server      = DB2/LINUXX8664 11.5.4.0
  SQL authorization ID = THAN6
  Local database alias = CS421

db2 => SELECT vdate, count(hinsurnum) AS PERSON_VACCINATED FROM VaccSlot WHERE hinsurnum IS NOT NULL GROUP BY vdate LIMIT 5
VDATE      PERSON_VACCINATED
-----
01/18/2021      5
02/06/2021      5
02/17/2021      5
02/25/2021      5
03/20/2021      6

  5 record(s) selected.
```

Total



(The Chinese on the right of the chart means "Total". Since the language of my Excel is Chinese, it cannot be changed.)

