VIETNAM NATIONAL UNIVERSITY, HO CHI MINH CITY
HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY
FACULTY OF COMPUTER SCIENCE AND ENGINEERING

DATABASE SYSTEMS LAB (CO2014)

ASSIGNMENT 2 REPORT

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PREFACE

In this assignment, we use Miscrosoft SQL Server Management Studio to CREATE, INSERT, UPDATE, SELECT data and writing FUNCTION, PROCEDURE. So the SYNTAX might be different from Oracle, MySQL.

In part 3, we use Django - a framework for developing web applications. To run the source code, installing Python and package Django is a must. In addition, Django by defaults support sqlite3, to connect MSSQL, we install packge **django-mssql-backend** from CMD.

Contents

1 Part 1

1.1 Implementing the database

```sql
-- Quaratine Camp --

CREATE DATABASE [Quaratine Camp];
GO

USE [Quaratine Camp]
GO

CREATE TABLE [People] (
    ID                  INT                     IDENTITY(1000,1),
    [Full name]         VARCHAR(25)             NOT NULL,
    Gender              CHAR(1)         DEFAULT NULL    CHECK(Gender='M'
     OR Gender='F'),
    Phone               VARCHAR(10),
    [Address]           VARCHAR(50),
    PRIMARY KEY (ID)
)
GO

CREATE TABLE [Head doctor] (
    ID                  INT,

    PRIMARY KEY(ID),

    FOREIGN KEY (ID) REFERENCES People(ID)
    ON DELETE CASCADE ON UPDATE CASCADE
)
GO

CREATE TABLE [Volunteer] (
    ID                  INT,

    PRIMARY KEY(ID),

    FOREIGN KEY (ID) REFERENCES People(ID)
    ON DELETE CASCADE ON UPDATE CASCADE
)
GO

CREATE TABLE [Manager] (
    ID                  INT,

    PRIMARY KEY(ID),
```

```
    FOREIGN KEY (ID) REFERENCES People(ID)
    ON DELETE CASCADE ON UPDATE CASCADE
)
GO

CREATE TABLE [Doctor] (
    ID              INT,

    PRIMARY KEY(ID),

    FOREIGN KEY (ID) REFERENCES People(ID)
    ON DELETE CASCADE ON UPDATE CASCADE
)
GO

CREATE TABLE [Staff] (
    ID              INT,

    PRIMARY KEY(ID),

    FOREIGN KEY (ID) REFERENCES People(ID)
    ON DELETE CASCADE ON UPDATE CASCADE
)
GO

CREATE TABLE [Nurse] (
    ID                INT,

    PRIMARY KEY(ID),
    FOREIGN KEY (ID) REFERENCES
    People(ID) ON DELETE CASCADE ON UPDATE CASCADE
)
GO

CREATE TABLE [Room] (
    ID                  INT                    NOT NULL,
    Capacity            INT                    NOT NULL,
    [Type]          VARCHAR(12)
    CHECK ([Type] = 'normal' OR [Type] = 'emergency' OR [Type] = 'recuperation')
    ,
    [Floor number]      INT                    NOT NULL,
    [Building id]      VARCHAR(5)              NOT NULL,

    PRIMARY KEY (ID, [Floor number], [Building id]),
)
GO

CREATE TABLE [Patient] (
    [Identity number] INT                      UNIQUE,
```

```
    [Unique number]     INT                        IDENTITY(100,1),
    [Full name]         VARCHAR(25)        NOT NULL,   Phone          VARCHAR
     (10),
    [Address]           VARCHAR(50),
    [Discharge date]    DATE               DEFAULT NULL,
    [Nurses id]         INT                NOT NULL,
    [Delivered from]    VARCHAR(50),
    [Admission date]    DATE               DEFAULT GETDATE()      NOT NULL,
    [Commorbidities]    VARCHAR(50),

    PRIMARY KEY ([Unique number]),

    FOREIGN KEY ([Nurses id])
    REFERENCES Nurse (ID) ON DELETE CASCADE ON UPDATE CASCADE
)
GO

CREATE TABLE [Medication] (
    [Unique code]     INT                  IDENTITY(1,1),
    [Name]            VARCHAR(50)        NOT NULL,
    Effect            VARCHAR(50),
    Price             MONEY              NOT NULL,
    [Expdate]         DATE                 NOT NULL,
    [Patient number]  INT                NOT NULL,

     PRIMARY KEY ([Unique code]),

     FOREIGN KEY ([Patient number])  REFERENCES Patient([Unique number])
    ON DELETE CASCADE ON UPDATE CASCADE
)
GO

CREATE TABLE [Assign] (
    [Room id]          INT,
    [Floor number]     INT,
    [Building id]      VARCHAR(5),
    [Staff id]         INT,
    [Patient number]   INT,

    PRIMARY KEY ([Patient number]),

    FOREIGN KEY ([Room id], [Floor number], [Building id])
    REFERENCES Room([ID], [Floor number], [Building id])
    ON DELETE CASCADE ON UPDATE CASCADE,

    FOREIGN KEY ([Staff id])
    REFERENCES Staff(ID) ON DELETE CASCADE,

    FOREIGN KEY ([Patient number])
```

```
        REFERENCES Patient([Unique number]) ON DELETE NO ACTION,
)
GO

CREATE TABLE [Treat] (
    [Doctor id]        INT,
    [Patient number]   INT,
    [Start date]       DATE                DEFAULT GETDATE()   NOT NULL,
    [End date]         DATE                DEFAULT NULL,
    Result             VARCHAR(50),

    PRIMARY KEY ([Doctor id], [Patient number]),

    FOREIGN KEY ([Doctor id]) REFERENCES Doctor(ID)
    ON DELETE NO ACTION ON UPDATE NO ACTION,

    FOREIGN KEY ([Patient number])
    REFERENCES Patient([Unique number])
    ON DELETE NO ACTION ON UPDATE NO ACTION,
)
GO

CREATE TABLE [Tests] (
    [Date]            DATE        DEFAULT GETDATE(),
    [PCR test]        VARCHAR(10)    DEFAULT NULL
    CHECK([PCR test] = 'Positive' OR [PCR test] = 'Negative'),
    [Quick test]      VARCHAR(10),
    SPO2              INT,
    Respiratory       VARCHAR(50),
    Warning           VARCHAR(10),
    [CT value]        INT,
    [Patient number]  INT,

    FOREIGN KEY ([Patient number])   REFERENCES Patient ([Unique number])
    ON DELETE NO ACTION ON UPDATE CASCADE
)
GO

CREATE TABLE [Track] (
    [Symptom]         VARCHAR(50),
    [Date]            DATE        DEFAULT GETDATE(),
    [Patient number]  INT,

    FOREIGN KEY ([Patient number])   REFERENCES Patient ([Unique number])
    ON DELETE NO ACTION ON UPDATE CASCADE
)
GO

CREATE TABLE [Location History] (
```

```
    [Patient number]   INT,
    Locations          VARCHAR(50),

    FOREIGN KEY ([Patient number])   REFERENCES Patient ([Unique number])
    ON DELETE NO ACTION ON UPDATE CASCADE
)
GO
```

- **All of *IDs*, *Unique codes*, *Patient number*, *SPO2*, *Ct Value***: We use the INT type with 3-digit numbers to identify each person as well as property more clearly.

- ***Names*, *Addresses*, Gender, *Types of symptom*, *Types of test and warning*, *Commorbidities*, Building ID, *Location*, *Result***: We use the VARCHAR(10) or VAR-CHAR(50) type to store information. With the length of 10 as well as 50, we can offer a comfort when we input the data. Especially, we use CHAR(1) for Gender to identify which Gender that person is. The *VARCHAR* or *CHAR* type is really convenient because all of the information needed to put in is all in string data type.

- ***Date* and *Money***: We use two data types to store these two values which are *DATE* type and *MONEY* type. These two types are widely used for storing date and money currency.

- **Constraints**:
    - *NOT NULL*: To ensure that a column cannot have a NULL value.
    - *CHECK*: To ensure that the values in a column satisfies a specific condition.
    - *UNIQUE*: To ensure that all values in a column are different.
    - *PRIMARY KEY*: A combination of a *NOT NULL* and *UNIQUE*. Uniquely identifies each row in a table.
    - *FOREIGN KEY*: To prevents actions that would destroy links between tables as well as link tables together.
    - *REFERENCES*: To link tables with FOREIGN KEY
    - *ON DELETE CASCADE*: To delete the rows from the child table automatically.
    - *ON UPDATE CASCADE*: If the parent primary key is changed, the child value will also change to reflect that.

1.2   Insert Data

```sql
-- INSERT DATA --
-- INSERT PEOPLE --
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Mark Goldbridge','M','2382848321','1013 Brown Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Henry Marshaw','M','2543828481','1172 Hickory Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('David Smith','M','8017304665','1096 Hickory Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Douglas Brown','M','9898351644','4318 Juniper Drive')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Maria Johnson','F','7572575831','569 Kildeer Drive')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('John Castle','M','3053330512','2350 Tyler Avenue')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Robert Stones','M','4156822413','357 Boring Lane')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Wanda Johnson','F','8033041699','3215 Wexford Way')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Frank Castle','M','4409888261','1208 Flynn Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Scott Atkinson','M','3055187614','4019 Poplar Lane')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Mary Bergin','F','2163620851','2711 Glenwood Avenue')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Lilly Teague','F','3125714777','4846 Patterson Fork Road')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Wendy Byrde','F','3055952620','1295 Poplar Lane')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Marty Byrde','M','4082533833','4830 Hide A Way Road')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Ruth Langmore','F','6128596428','1818 Rocket Drive')
GO
```

```sql
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Omar Navarro','M','5033143614','4321 Watson Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Helen Pierce','F','9164010999','2234 Pearl Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Petty Moore','M','5303788087','1634 Riverwood Drive')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Matt Murdock','M','3042771891','4572 Froe Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Jayson Williams','M','7742845302','4043 Oak Way')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Adam Zapel','M','3465871156','6314 Oak Way')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Barb E. Dahl','M','7411123549','3432 Watson Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Biff Wellington','M','9865656233','3332 Poplar Lane')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Jack Pott','M','7981546346','297 Boring Lane')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Earl E. Bird','M','1133456217','716 Juniper Drive')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Agnes Pierce','F','9456315487','2103 Juniper Drive')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Ellis Collins ','F','2389716786','862 Maddox Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Marie Lopez','F','2234876412','441 Riverwood Drive')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Bethany Howard','F','7439216931','619 Abbey Road')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Hollie Reid','F','3541275129','123 Carnaby Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Paige Brown','F','4243651975','2031 Carnaby Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
```

```sql
VALUES  ('Kyla Russell','F','7576213491','1421 Monument Road')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Niall Doyle','M','7112978412','753 Monument Road')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Ralph Roberts','M','4131423691','2424 Shaftesbury Avenue')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Frederick Jenkins','M','9634789741','477 Downing Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Isaiah Griffin','M','3211467913','79 Manciple Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Haris Cook','M','3974136491','793 Newgate Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Kelly Kelly','M','4741369236','2333 Fleet Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Brett Cruz','M','3126431387','631 Fleet Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Aaron Miller','M','1349178643','346 Charterhouse Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Erica Mccarthy','M','7134615965','953 Waterloo Road')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Conner Powell','M','2645935731','1469 Lambeth Road')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Farhan Wright','M','4136514275','2310 Eagle Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Harley Garcia','M','5469713523','553 Brooke Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Erik Griffiths','M','3549135678','1532 Great Ormond Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Robbie Owen','M','3123649785','346 Portpool Lane')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Omar Murray','M','4231658712','691 Cole Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Omar Murray','M','4789145236','72 Cole Street')
```

```
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Alec Murphy','M','3124678561','113 Heygate Street')
GO
INSERT INTO [dbo].[People]  ([Full name],[Gender],[Phone],[Address])
VALUES  ('Eddie Graham','M','1975843611','113 Rodney Road')
GO

-- INSERT HEAD DOCTOR --
INSERT INTO [dbo].[Head doctor] VALUES (1000)
GO

-- INSERT DOCTOR --
INSERT INTO [dbo].[Doctor] VALUES (1000)
GO
INSERT INTO [dbo].[Doctor] VALUES (1001)
GO
INSERT INTO [dbo].[Doctor] VALUES (1002)
GO
INSERT INTO [dbo].[Doctor] VALUES (1003)
GO
INSERT INTO [dbo].[Doctor] VALUES (1004)
GO


-- INSERT NURSE --
INSERT INTO [dbo].[Nurse] VALUES (1005)
GO
INSERT INTO [dbo].[Nurse] VALUES (1006)
GO
INSERT INTO [dbo].[Nurse] VALUES (1007)
GO
INSERT INTO [dbo].[Nurse] VALUES (1008)
GO
INSERT INTO [dbo].[Nurse] VALUES (1009)
GO

-- INSERT ROOM --
INSERT INTO [dbo].[Room]    ([ID],[Capacity],[Type],[Floor number],[Building id
    ])
VALUES  (1,3,'normal',1,'A')
GO
INSERT INTO [dbo].[Room]    ([ID],[Capacity],[Type],[Floor number],[Building id
    ])
VALUES  (2,3,'emergency',1,'A')
GO
INSERT INTO [dbo].[Room]    ([ID],[Capacity],[Type],[Floor number],[Building id
    ])
VALUES  (3,3,'recuperation',1,'A')
GO
```

```sql
INSERT INTO [dbo].[Room]     ([ID],[Capacity],[Type],[Floor number],[Building id
    ])
VALUES  (1,3,'normal',2,'A')
GO
INSERT INTO [dbo].[Room]     ([ID],[Capacity],[Type],[Floor number],[Building id
    ])
VALUES  (2,3,'emergency',2,'A')
GO
INSERT INTO [dbo].[Room]     ([ID],[Capacity],[Type],[Floor number],[Building id
    ])
VALUES  (3,3,'recuperation',2,'A')
GO
INSERT INTO [dbo].[Room]     ([ID],[Capacity],[Type],[Floor number],[Building id
    ])
VALUES  (1,3,'normal',1,'B')
GO
INSERT INTO [dbo].[Room]     ([ID],[Capacity],[Type],[Floor number],[Building id
    ])
VALUES  (2,3,'emergency',1,'B')
GO
INSERT INTO [dbo].[Room]     ([ID],[Capacity],[Type],[Floor number],[Building id
    ])
VALUES  (3,3,'recuperation',1,'B')
GO
INSERT INTO [dbo].[Room]     ([ID],[Capacity],[Type],[Floor number],[Building id
    ])
VALUES  (1,3,'normal',2,'B')
GO
INSERT INTO [dbo].[Room]     ([ID],[Capacity],[Type],[Floor number],[Building id
    ])
VALUES  (2,3,'emergency',2,'B')
GO
INSERT INTO [dbo].[Room]     ([ID],[Capacity],[Type],[Floor number],[Building id
    ])
VALUES  (3,3,'recuperation',2,'B')
GO

-- INSERT PATIENT --
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES  (1125,'Ruth Langmore','6128596428','1818 Rocket Drive','20211101',1008,
    'Sai Gon','20211027','Healthy')
GO
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES  (1126,'Omar Navarro','5033143614','4321 Watson Street','20211101',1005,
    'A201','20211010', 'Asthma, Arthritis')
```

```sql
GO
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES  (1127,'Helen Pierce','9164010999','2234 Pearl Street','20211103',1009,'
    A203','20211012','Healthy')
GO
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES  (1128,'Petty Moore','5303788087','1634 Riverwood Drive','20211103'
    ,1009,'A103','20211012', 'Stroke, Cardiovascular disease')
GO
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES  (1129,'Matt Murdock','3042771891','4572 Froe Street','20211027',1005,'
    A103','20211009','Asthma, Hypertension')
GO
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES  (1130,'Jayson Williams','7742845302','4043 Oak Way','20211101',1005,'
    A103','20211015','Healthy')
GO
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES  (1131,'Frank Lampard','6723984624','3542 Abbey Road','20211030',1009,'
    A301','20211014','Healthy')
GO
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES  (1132,'Peter Cech','7443194412','1002 Carnaby Street','20211113',1008,'
    A201','20211025','Asthma')
GO
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES  (1133,'Wayne Rooney','3546971122','1354 Cranbourn Street','20211120'
    ,1005,'A301','20211105','Healthy')
GO
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES  (1134,'Paul School','4653987516','1056 Shaftesbury Avenue','20211107'
    ,1008,'A103','20211013', 'Cardiovascular disease, Stroke')
GO
```

```sql
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES (1135,'Steven Gerard','7896315216','3049 Maddox Street','20211105'
    ,1005,'A203','20211015','Pneumonia, Sleep apnea, Hypertension')
GO
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES (1136,'Asley Cole','7778462112','1112 Teignmouth Road','20211107',1008,
    'A103','20211021','Healthy')
GO
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES (1137,'Christian Benteke','4231648956','2640 Ruby Street','20211113'
    ,1009,'A301','20211028','Healthy')
GO
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES (1138,'Peter Crouch','1341688946','1955 Woodford Avenue','20211117'
    ,1005,'A203','20211023', 'Pneumonia, Hypertension, Dyslipidemia' )
GO
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES (1139,'Selena Harmony','6794134466','3146 Monument Road','20211106'
    ,1005,'A103','20211021','Healthy')
GO
INSERT INTO [dbo].[Patient]([Identity number],[Full name],[Phone],[Address],[
    Discharge date],[Nurses id],[Delivered from],[Admission date],[
    Commorbidities])
VALUES (1140,'Miley Senestria','3461782612','1777 Rochester Way','20211104'
    ,1008,'A203','20211018','Asthma')
GO

-- INSERT TESTS --
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES ('20211027','Positive','Positive',98,'Normal','Level 0',28,100)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES ('20211031','Negative','Negative',98,'Normal','Level 0',32,100)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES ('20211101','Negative','Negative',99,'Normal','Level 0',33,100)
```

```
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211010','Positive','Positive',93,'Abnormal - Asthma','Level 2'
    ,25,101)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211015','Positive','Positive',94,'Abnormal - Asthma','Level 1'
    ,27,101)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211031','Negative','Negative',98,'Normal','Level 0',31,101)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211101','Negative','Negative',97,'Normal','Level 0',34,101)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211012','Positive','Positive',98,'Normal','Level 0',28,102)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211102','Negative','Negative',99,'Normal','Level 0',32,102)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211103','Negative','Negative',100,'Normal','Level 0',33,102)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211012','Positive','Positive',92,'Abormal - Congestive heart
    failure','Level 3',26,103)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211015','Positive','Positive',94,'Abormal - Congestive heart
    failure','Level 3',27,103)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211102','Negative','Negative',98,'Normal','Level 0',30,103)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211103','Negative','Negative',101,'Normal','Level 0',32,103)
GO
```

```sql
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211009','Positive','Positive',95,'Abnormal - asthma','Level 1'
    ,25,104)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211016','Positive','Positive',96,'Abnormal - asthma','Level 1'
    ,26,104)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211026','Negative','Negative',98,'Normal','Level 0',31,104)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211027','Negative','Negative',99,'Normal','Level 0',35,104)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211015','Positive','Positive',97,'Normal','Level 0',25,105)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211031','Negative','Negative',99,'Normal','Level 0',29,105)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211101','Negative','Negative',100,'Normal','Level 0',31,105)
GO

-- INSERT VOLUNTEER --
INSERT INTO [dbo].[Volunteer] VALUES (1010)
GO
INSERT INTO [dbo].[Volunteer] VALUES (1011)
GO
INSERT INTO [dbo].[Volunteer] VALUES (1012)
GO
INSERT INTO [dbo].[Volunteer] VALUES (1013)
GO
INSERT INTO [dbo].[Volunteer] VALUES (1014)
GO
INSERT INTO [dbo].[Volunteer] VALUES (1015)
GO
INSERT INTO [dbo].[Volunteer] VALUES (1016)
GO
INSERT INTO [dbo].[Volunteer] VALUES (1017)
GO
INSERT INTO [dbo].[Volunteer] VALUES (1018)
```

```
GO
INSERT INTO [dbo].[Volunteer] VALUES (1019)
GO

-- INSERT MANAGER --
INSERT INTO [dbo].[Manager] VALUES (1020)
GO
INSERT INTO [dbo].[Manager] VALUES (1021)
GO
INSERT INTO [dbo].[Manager] VALUES (1022)
GO
INSERT INTO [dbo].[Manager] VALUES (1023)
GO

-- INSERT Staff --
INSERT INTO [dbo].[Staff] VALUES (1024)
GO
INSERT INTO [dbo].[Staff] VALUES (1025)
GO
INSERT INTO [dbo].[Staff] VALUES (1026)
GO
INSERT INTO [dbo].[Staff] VALUES (1027)
GO
INSERT INTO [dbo].[Staff] VALUES (1028)
GO
INSERT INTO [dbo].[Staff] VALUES (1029)
GO
INSERT INTO [dbo].[Staff] VALUES (1030)
GO
INSERT INTO [dbo].[Staff] VALUES (1031)
GO
INSERT INTO [dbo].[Staff] VALUES (1032)
GO
INSERT INTO [dbo].[Staff] VALUES (1033)
GO
INSERT INTO [dbo].[Staff] VALUES (1034)
GO
INSERT INTO [dbo].[Staff] VALUES (1035)
GO
INSERT INTO [dbo].[Staff] VALUES (1036)
GO
INSERT INTO [dbo].[Staff] VALUES (1037)
GO
INSERT INTO [dbo].[Staff] VALUES (1038)
GO
INSERT INTO [dbo].[Staff] VALUES (1039)
GO
INSERT INTO [dbo].[Staff] VALUES (1040)
GO
```

```sql
-- INSERT MEDICATION --
INSERT INTO [dbo].[Medication] ([Name],[Effect],[Price],[Expdate],[Patient
    number])
VALUES ('Thiazide Diuretic','Control high blood pressure','$8', '20231231',100)
GO
INSERT INTO [dbo].[Medication] ([Name],[Effect],[Price],[Expdate],[Patient
    number])
VALUES ('Aspirin','Reduces blood clotting','$9.75', '20220630',101)
GO
INSERT INTO [dbo].[Medication] ([Name],[Effect],[Price],[Expdate],[Patient
    number])
VALUES ('Angiotensin-converting enzyme','Relax the veins','$9', '20230630',105)
GO
INSERT INTO [dbo].[Medication] ([Name],[Effect],[Price],[Expdate],[Patient
    number])
VALUES ('Levofloxacin','Treat infections','$11.7', '20231231',102)
GO
INSERT INTO [dbo].[Medication] ([Name],[Effect],[Price],[Expdate],[Patient
    number])
VALUES ('Fluticasone','Treat allergic rhinitis','$14.13', '20221231',103)
GO

-- INSERT TEST --
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211027','Positive','Positive',98,'Normal','Level 0',28,100)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211031','Negative','Negative',98,'Normal','Level 0',32,100)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211101','Negative','Negative',99,'Normal','Level 0',33,100)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211010','Positive','Positive',93,'Abnormal - Asthma','Level 1'
    ,25,101)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211015','Positive','Positive',94,'Abnormal - Asthma','Level 1'
    ,27,101)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211031','Negative','Negative',98,'Normal','Level 0',31,101)
```

```sql
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211101','Negative','Negative',97,'Normal','Level 0',34,101)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211012','Positive','Positive',98,'Normal','Level 0',28,102)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211102','Negative','Negative',99,'Normal','Level 0',32,102)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211103','Negative','Negative',100,'Normal','Level 0',33,102)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211012','Positive','Positive',92,'Abormal - Congestive heart
    failure','Level 3',26,103)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211015','Positive','Positive',94,'Abormal - Congestive heart
    failure','Level 3',27,103)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211102','Negative','Negative',98,'Normal','Level 0',30,103)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211103','Negative','Negative',101,'Normal','Level 0',32,103)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211009','Positive','Positive',95,'Abnormal - asthma','Level 1'
    ,25,104)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211016','Positive','Positive',96,'Abnormal - asthma','Level 1'
    ,26,104)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211026','Negative','Negative',98,'Normal','Level 0',31,104)
GO
```

```sql
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211027','Negative','Negative',99,'Normal','Level 0',35,104)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211015','Positive','Positive',97,'Normal','Level 0',25,105)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211031','Negative','Negative',99,'Normal','Level 0',29,105)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211101','Negative','Negative',100,'Normal','Level 0',31,105)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211014','Positive','Positive',99,'Normal','Level 0',29,106)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211029','Negative','Negative',99,'Normal','Level 0',32,106)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211030','Negative','Negative',101,'Normal','Level 0',33,106)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211025','Positive','Positive',96,'Abnormal - asthma','Level 1'
    ,26,107)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211112','Negative','Negative',97,'Abnormal - asthma','Level 1'
    ,33,107)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211113','Negative','Negative',99,'Abnormal - asthma','Level 1'
    ,34,107)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211105','Positive','Positive',99,'Normal','Level 0',27,108)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
```

```sql
VALUES  ('20211119','Negative','Negative',100,'Normal','Level 0',31,108)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211120','Negative','Negative',100,'Normal','Level 0',33,108)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211013','Positive','Positive',94,'Abormal - Congestive heart
    failure','Level 3',22,109)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211020','Positive','Positive',95,'Abormal - Congestive heart
    failure','Level 3',23,109)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211027','Positive','Positive',96,'Abormal - Congestive heart
    failure','Level 3',25,109)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211106','Negative','Negative',99,'Normal','Level 0',31,109)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211107','Negative','Negative',100,'Normal','Level 0',33,109)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211015','Positive','Positive',95,'Abnormal - Pneumonia','Level 2'
    ,23,110)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211022','Positive','Positive',96,'Abnormal - Pneumonia','Level 2'
    ,25,110)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211104','Negative','Negative',98,'Normal','Level 0',32,110)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211105','Negative','Negative',99,'Normal','Level 0',32,110)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
```

```sql
VALUES  ('20211021','Positive','Positive',98,'Normal','Level 0',28,111)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211106','Negative','Negative',99,'Normal','Level 0',34,111)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211107','Negative','Negative',101,'Normal','Level 0',35,111)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211028','Positive','Positive',99,'Normal','Level 0',27,112)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211112','Negative','Negative',100,'Normal','Level 0',30,112)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211113','Negative','Negative',99,'Normal','Level 0',31,112)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211023','Positive','Positive',94,'Abnormal - Pneumonia','Level 2'
    ,23,113)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211030','Positive','Positive',95,'Abnormal - Pneumonia','Level 2'
    ,24,113)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211116','Negative','Negative',98,'Normal','Level 0',32,113)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211117','Negative','Negative',99,'Normal','Level 0',33,113)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211021','Positive','Positive',98,'Normal','Level 0',27,114)
GO
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211105','Negative','Negative',100,'Normal','Level 0',30,114)
GO
```

```sql
INSERT INTO [dbo].[Tests] ([Date],[PCR test],[Quick test],[SPO2],[Respiratory
    ],[Warning],[CT value],[Patient number])
VALUES  ('20211106','Negative','Negative',100,'Normal','Level 0',32,114)
GO

-- INSERT ASSIGN --
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (1,1,'A',1029,100)
GO
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (1,1,'A',1024,101)
GO
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (1,1,'A',1025,102)
GO
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (3,1,'A',1030,103)
GO
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (1,2,'A',1026,104)
GO
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (1,2,'A',1025,105)
GO
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (1,2,'A',1027,106)
GO
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (1,2,'A',1025,107)
GO
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (1,2,'A',1031,108)
GO
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (2,2,'A',1028,109)
GO
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (1,1,'B',1034,110)
```

```sql
GO
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (1,2,'B',1037,111)
GO
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (1,2,'B',1040,112)
GO
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (3,1,'B',1039,113)
GO
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (1,1,'B',1034,114)
GO
INSERT INTO [dbo].[Assign] ([Room id],[Floor number],[Building id],[Staff id],[
    Patient number])
VALUES (1,2,'B',1035,115)
GO


-- INSERT LOCATION HISTORY
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (100,'1.1A')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (101,'1.1A')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (102,'1.1A')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (103,'3.1A')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (103,'2.1A')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (103,'1.2A')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (104,'1.2A')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (105,'1.2A')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
```

```sql
VALUES (106,'1.3A')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (107,'1.3A')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (108,'1.4A')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (109,'3.2A')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (109,'2.2A')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (109,'1.1B')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (110,'1.1B')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (111,'1.2B')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (112,'1.2B')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (113,'3.1B')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (113,'2.1B')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (113,'1.3B')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (114,'1.3B')
GO
INSERT INTO [dbo].[Location History] ([Patient number],Locations)
VALUES (115,'1.4B')
GO

-- INSERT TREAT --
INSERT INTO [dbo].[Treat] ([Doctor id],[Patient number],[Start date],[End date
    ],Result)
VALUES (1000,101,'20211015','20211020','Successful')
GO
INSERT INTO [dbo].[Treat] ([Doctor id],[Patient number],[Start date],[End date
    ],Result)
```

```
VALUES (1000,104,'20211016','20211022','Successful')
GO
INSERT INTO [dbo].[Treat] ([Doctor id],[Patient number],[Start date],[End date
    ],Result)
VALUES (1001,107,'20211025','20211031','Successful')
GO
INSERT INTO [dbo].[Treat] ([Doctor id],[Patient number],[Start date],[End date
    ],Result)
VALUES (1001,115,'20211018','20211023','Successful')
GO
INSERT INTO [dbo].[Treat] ([Doctor id],[Patient number],[Start date],[End date
    ],Result)
VALUES (1003,103,'20211012','20211023','Successful')
GO
INSERT INTO [dbo].[Treat] ([Doctor id],[Patient number],[Start date],[End date
    ],Result)
VALUES (1004,109,'20211013','20211025','Successful')
GO
INSERT INTO [dbo].[Treat] ([Doctor id],[Patient number],[Start date],[End date
    ],Result)
VALUES (1002,110,'20211015','20211023','Successful')
GO
INSERT INTO [dbo].[Treat] ([Doctor id],[Patient number],[Start date],[End date
    ],Result)
VALUES (1002,113,'20211023','20211101','Successful')
GO

-- INSERT TRACK --
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Cough, Headache','20211030',100)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Fast heartbeat, Wheezing','20211015',101)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Cough','20211020',101)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Headache, Sore throat','20211012',102)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Difficulty breathing','20211015',103)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Headache','20211022',103)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Cough, Headache','20211012',104)
GO
```

```sql
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Headache, Diarrhea','20211018',105)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Cough, Headache','20211017',106)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Fast heartbeat, Wheezing','20211028',107)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Headache, Diarrhea','20211108',108)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fatigue, Irregular heartbeat','20211016',109)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Headache','20211026',109)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Sweating, Shivering, difficulty breathing','20211018',110)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Cough,','20211028',110)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Cough, Headache','20211024',111)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Cough, Headache','20211031',112)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Sweating, Shivering, Headache','20211026',113)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Headache','20211024',114)
GO
INSERT INTO [dbo].[Track] ([Symptom],[Date],[Patient number])
VALUES ('Fever, Fast heartbeat, Wheezing','20211021',115)
GO
```

2 Part 2

2.1 Update Patient PCR test

```sql
UPDATE
    [dbo].[Tests]
SET
    [PCR test] = 'Positive',
    [CT value] = NULL
WHERE
    [Date] >= '2020-01-09'
GO
```

2.2 Select all the patient information whose name is 'Nguyen Van A'

```sql
SELECT *
FROM
    [dbo].[Patient]
WHERE
    [Full name] = 'Nguyen Van A'
GO
```

2.3 Function to calculate the testing for each patient

```sql
CREATE FUNCTION CalculateTesting (@PatientID INT)
RETURNS TABLE
AS
RETURN (
    SELECT
        [Date],[Identity number],[Unique number],[Full name],
        [PCR test],[Quick test],[SPO2],[Respiratory],[Warning],[CT value]
    FROM
        [dbo].[Tests] AS test INNER JOIN [dbo].[Patient] AS patient
        ON (test.[Patient number] = patient.[Unique number])
    WHERE
        patient.[Identity number] = @PatientID
)
GO
```

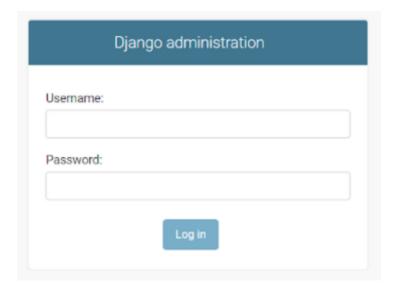## 2.4 A procedure to sort the nurses in decreasing number of patients he/she takes care in a period of time

```sql
CREATE PROCEDURE Sort_Nurses
    @Start DATE,
    @End DATE
AS BEGIN
    WITH temp AS
    (SELECT
        [Nurses id],
        COUNT(*) AS patient_count
    FROM
        [Nurse] AS n INNER JOIN [Patient] AS p
        ON n.[ID] = p.[Nurses id]
    WHERE
        p.[Admission date] >= @Start
        AND p.[Discharge date] <= @End
    GROUP BY
        [Nurses id])
    SELECT [ID],[Full name],[Gender],[Phone],[Address],[patient_count]
    FROM
        temp INNER JOIN [People] AS p ON temp.[Nurses id] = p.[ID]
    ORDER BY
        [patient_count] DESC;
END
```

3 Part 3

3.1 Search patient information: Search results include the name, phone number and information about his/her comorbidities.

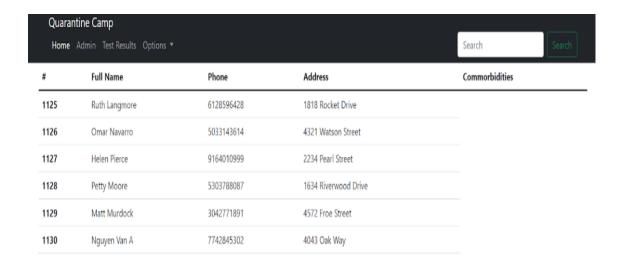Login to the database (enter username and password for Manager account).

After log in, click on "View Site" on the admin page.

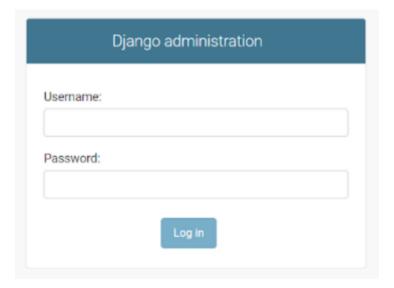The homepage appears after user clicks on "View Site".

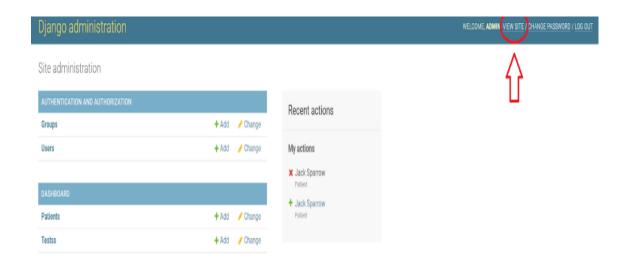Search patient with result includes the name, phone number and information about his/her comorbidities.

3.2   Add information for a new patient.

Login to the database (enter username and password for Manager account).

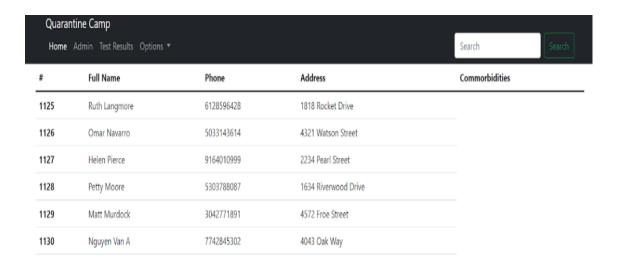After log in, click on "View Site" on the admin page.
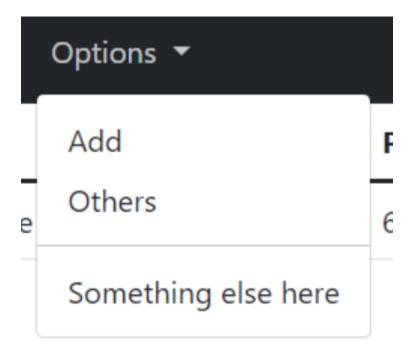
The homepage appears after user clicks on "View Site".

Click on "Options" (below the word "Quarantine Camp") and pick "Add".
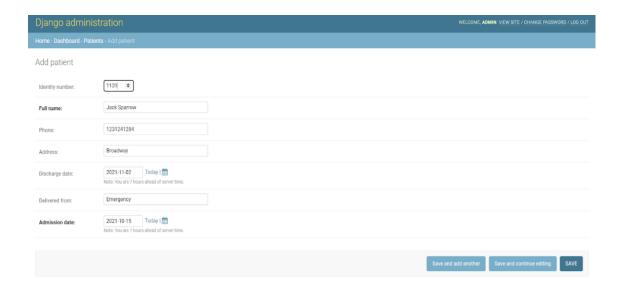
The add-section page appears after the user picks "Add".

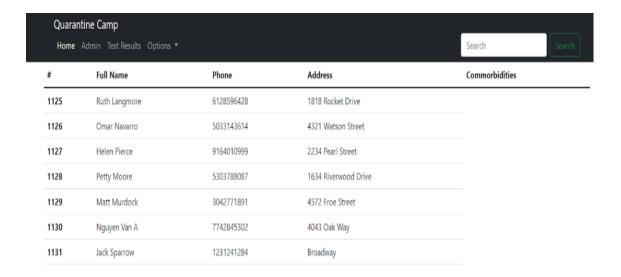Fill in the information about the new patient and click "Save" to add a new patient.

When adding a new patient is successful.

The table after adding is successful.

3.3 List details of all testing which belong to a patient.

Date	Patient	PCR Test	Quick Test	SPO2	Respiratory	Warning	CT Value
Oct. 27, 2021	Ruth Langmore	Positive	Positive	98	Normal	Level 0	None
Oct. 31, 2021	Ruth Langmore	Positive	Negative	98	Normal	Level 0	None
Nov. 1, 2021	Ruth Langmore	Positive	Negative	99	Normal	Level 0	None
Oct. 10, 2021	Omar Navarro	Positive	Positive	93	Abnormal - Asthma	Level 2	None
Oct. 15, 2021	Omar Navarro	Positive	Positive	94	Abnormal - Asthma	Level 1	None
Oct. 31, 2021	Omar Navarro	Positive	Negative	98	Normal	Level 0	None
Nov. 1, 2021	Omar Navarro	Positive	Negative	97	Normal	Level 0	None
Oct. 12, 2021	Helen Pierce	Positive	Positive	98	Normal	Level 0	None
Nov. 2, 2021	Helen Pierce	Positive	Negative	99	Normal	Level 0	None
Nov. 3, 2021	Helen Pierce	Positive	Negative	100	Normal	Level 0	None
Oct. 12, 2021	Petty Moore	Positive	Positive	92	Abormal - Congestive heart failure	Level 3	None
Oct. 15, 2021	Petty Moore	Positive	Positive	94	Abormal - Congestive heart failure	Level 3	None
Nov. 2, 2021	Petty Moore	Positive	Negative	98	Normal	Level 0	None
Nov. 3, 2021	Petty Moore	Positive	Negative	101	Normal	Level 0	None
Oct. 9, 2021	Matt Murdock	Positive	Positive	95	Abnormal - asthma	Level 1	None