Final Loading Data

J.Mo Yang

In [88]:
```
import sqlite3
import pandas as pd
```

In [89]:
```
conn = sqlite3.connect('Final.db')
curs = conn.cursor()
curs.execute("PRAGMA foreign_keys=ON;")
```

Out[89]: <sqlite3.Cursor at 0x7f11a5491b20>

In [90]:
```
curs.execute("DROP TABLE IF EXISTS tState;")
curs.execute("DROP TABLE IF EXISTS tPopDensity")
curs.execute("DROP TABLE IF EXISTS tStayAtHome;")
curs.execute("DROP TABLE IF EXISTS tEmergency;")
curs.execute("DROP TABLE IF EXISTS tCovidDaily;")
```

Out[90]: <sqlite3.Cursor at 0x7f11a5491b20>

In [91]:
```
sql = """CREATE TABLE tState (
            State TEXT PRIMARY KEY,
            st TEXT CHECK(length(st)==2));"""

curs.execute(sql)
```

Out[91]: <sqlite3.Cursor at 0x7f11a5491b20>

In [92]:
```
sql = """CREATE TABLE tPopDensity (
            State TEXT REFERENCES tState(state),
            Pop19 INTEGER NOT NULL,
            LandSqMi NUMERIC NOT NULL,
            LandSqKM NUMERIC NOT NULL,
            PopSqMi NUMERIC NOT NULL,
            PopSqKM NUMERIC NOT NULL,
            PRIMARY KEY(State));"""

curs.execute(sql)
```

Out[92]: <sqlite3.Cursor at 0x7f11a5491b20>

In [93]:
```
sql="""CREATE TABLE tStayAtHome(
            State TEXT REFERENCES tState(state),
            DateAnnounce TEXT NOT NULL,
            EffectDate TEXT NOT NULL,
            PRIMARY KEY (State));"""

curs.execute(sql)
```

Out[93]: <sqlite3.Cursor at 0x7f11a5491b20>

In [94]:
```
sql = """CREATE TABLE tCovidDaily (
            State TEXT REFERENCES tState(State),
```

```
            st TEXT NOT NULL,
            Date TEXT NOT NULL,
            Positive NUMERIC NOT NULL,
            Negative NUMERIC NOT NULL,
            death NUMERIC NOT NULL,
            Recovered NUMERIC NOT NULL,
            PositiveInc NUMERIC NOT NULL,
            NegativeInc NUMERIC NOT NULL,
            DeathInc NUMERIC NOT NULL,
            TotalTResult NUMERIC NOT NULL,
            TotalTResultsInc NUMERIC NOT NULL,
            HospitalCurrent NUMERIC NOT NULL,
            HospitalCumulative NUMERIC NOT NULL,
            HospitalIncrease NUMERIC NOT NULL,
            ICUCurrent NUMERIC NOT NULL,
            ICUCumulative NUMERIC NOT NULL,
            VentilatorCurrent NUMERIC NOT NULL,
            VentilatorCumulative NUMERIC NOT NULL,
            PRIMARY KEY (Date, State));"""

curs.execute(sql)
```

Out[94]: <sqlite3.Cursor at 0x7f11a5491b20>

In [95]:
```
sql= """CREATE TABLE tEmergency (
            State TEXT REFERENCES tState(State),
            StateEmergency TEXT NOT NULL,
            FirstSchoolClose TEXT NOT NULL,
            PRIMARY KEY (State));"""

curs.execute(sql)
```

Out[95]: <sqlite3.Cursor at 0x7f11a5491b20>

In [96]:
```
tState=pd.read_csv('./data/states.csv')
```

In [97]:
```
tState = tState.rename({"state":"State"},axis='columns')
```

In [98]:
```
tPopDensity=pd.read_csv('./data/PopDensity.csv')
```

In [99]:
```
tStayAtHome=pd.read_csv('./data/StayAtHome_KFF_Clean.csv')
```

In [100…
```
tCovidDaily=pd.read_csv('./data/CovidDailyTracking_Filtered_Nov16.csv')
```

In [101…
```
tCovidDaily=pd.merge(tState,tCovidDaily, how='left', left_on='st', right_on='state')
```

In [102…
```
tCovidDaily= tCovidDaily.drop(columns=['state'])
```

In [103…
```
tCovidDaily= tCovidDaily.fillna(value=0)
```

In [104…
```
tEmergency= pd.read_csv('./data/Ballotpedia_StateEmergency.csv')
```

In [105…
```
#Load data
sql= "INSERT INTO tState Values(?,?);"
for row in tState.values:
    curs.execute(sql,tuple(row))
```

In [106…
```
#Check
#pd.read_sql("SELECT * FROM tState LIMIT 3;",conn)
```

In [107…
```
sql = "INSERT INTO tPopDensity VALUES(?,?,?,?,?,?);"
for row in tPopDensity.values:
    curs.execute(sql, tuple(row))
```

In [108…
```
#Check
#pd.read_sql("SELECT * FROM tPopDensity LIMIT 3;",conn)
```

In [109…
```
sql = "INSERT INTO tStayAtHome VALUES(?,?,?);"
for row in tStayAtHome.values:
    curs.execute(sql, tuple(row))
```

In [110…
```
sql = "INSERT INTO tCovidDaily VALUES(?,?,?,?,?,?,?,?,?,?,?,?,?,?,?,?,?,?,?,?,?,?,?);"
for row in tCovidDaily.values:
    curs.execute(sql, tuple(row))
```

In [111…
```
sql = "INSERT INTO tEmergency VALUES(?,?,?);"
for row in tEmergency.values:
    curs.execute(sql, tuple(row))
```

In [112…
```
conn.commit()
conn.close()
```

In [ ]:
```
```