DavidGrice Final CreateTables

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0.1 Libraries used for creation

```
[]: import sqlite3 import os
```

0.2 Connect to Database

```
[]: path = './AliensExist.db'
if os.path.exists(path):
    os.remove(path)
conn = sqlite3.connect(path)
curs = conn.cursor()
```

0.3 Functions used for creation

```
[]: def createView(name,sql):
    curs.execute("DROP VIEW IF EXISTS " + name)
    curs.execute("CREATE VIEW " + name + " AS " + sql)
    conn.commit()
```

0.4 Tables for UFO data

```
curs.execute("DROP TABLE IF EXISTS tODay")
sql = """CREATE TABLE tODay (
            id INTEGER NOT NULL PRIMARY KEY,
            day TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tOYear")
sql = """CREATE TABLE tOYear (
            id INTEGER NOT NULL PRIMARY KEY,
            year TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tUFOOriginalDate")
sql = """CREATE TABLE tUFOOriginalDate(
            sighting_id INTEGER NOT NULL PRIMARY KEY REFERENCES_
→tUFOSightingInfo(sighting_id),
            time TEXT REFERENCES tUFOSightingInfo(time),
            origMonth TEXT REFERENCES tOMonth(month),
            origDay TEXT REFERENCES tODay(day),
            origYear TEXT REFERENCES tOYear(year));"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tPMonth")
sql = """CREATE TABLE tPMonth (
            id INTEGER NOT NULL PRIMARY KEY,
           month TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tPDay")
sql = """CREATE TABLE tPDay (
            id INTEGER NOT NULL PRIMARY KEY,
            day TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tPYear")
sql = """CREATE TABLE tPYear (
            id INTEGER NOT NULL PRIMARY KEY,
            year TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tUFOPostedDate")
sql = """CREATE TABLE tUFOPostedDate(
            sighting_id INTEGER NOT NULL PRIMARY KEY REFERENCES_
→tUFOSightingInfo(sighting_id),
            postMonth TEXT REFERENCES tPMonth(month),
            postDay TEXT REFERENCES tPDay(day),
            postYear TEXT REFERENCES tPYear(year));"""
```

```
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tLongitude")
sql = """CREATE TABLE tLongitude(
            id INTEGER NOT NULL PRIMARY KEY,
            longitude TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tLatitude")
sql = """CREATE TABLE tLatitude(
            id INTEGER NOT NULL PRIMARY KEY,
           latitude TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tDuration")
sql = """CREATE TABLE tDuration (
            id INTEGER NOT NULL PRIMARY KEY,
            seconds TEXT,
            other TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tUFOCOM")
sql = """CREATE TABLE tUFOCOM (
            id INTEGER NOT NULL PRIMARY KEY,
            com TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tShape")
sql = """CREATE TABLE tShape(
            id INTEGER NOT NULL PRIMARY KEY,
            shape TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tCity")
sql = """CREATE TABLE tCity(
            id INTEGER NOT NULL PRIMARY KEY,
            city TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tUFOCityInfo")
sql = """CREATE TABLE tUFOCityInfo(
            sighting_id INTEGER NOT NULL PRIMARY KEY REFERENCES_

→tUFOSightingInfo(sighting_id),
            ufoCity TEXT REFERENCES tCity(city),
            ufoLatitude TEXT REFERENCES tLatitude(latitude),
            ufoLongitude TEXT REFERENCES tLongitude(longitude));"""
curs.execute(sql)
```

```
curs.execute("DROP TABLE IF EXISTS tState")
sql = """CREATE TABLE tState(
           id INTEGER NOT NULL PRIMARY KEY,
           state TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tUFOCityStateCountry")
sql = """CREATE TABLE tUFOCityStateCountry(
           sighting_id INTEGER NOT NULL PRIMARY KEY REFERENCES_
city TEXT REFERENCES tUFOCityInfo(ufoCity),
           state TEXT REFERENCES tState(state),
           country TEXT REFERENCES tCountry(country));"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tCountry")
sql = """CREATE TABLE tCountry(
           id INTEGER NOT NULL PRIMARY KEY,
           country TEXT)"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tUFOStateCountry")
sql = """CREATE TABLE tUFOStateCountry(
           sighting_id INTEGER NOT NULL PRIMARY KEY REFERENCES_
state TEXT REFERENCES tUFOCityState(state),
           country TEXT REFERENCES tCountry(country));"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tUFOSightingInfo")
sql = """CREATE TABLE tUFOSightingInfo (
           sighting_id INTEGER NOT NULL PRIMARY KEY,
           time TEXT REFERENCES tTime(time),
           city TEXT REFERENCES tCity(city),
           comments TEXT REFERENCES tUFOCOM(com),
           shape TEXT REFERENCES tShape(shape),
           duration_seconds TEXT REFERENCES tDuration(seconds),
           duration_other TEXT REFERENCES tDuration(other),
           count INTEGER NOT NULL);"""
curs.execute(sql)
conn.commit()
```

0.5 Tables for Flight data

```
[]: curs.execute("DROP TABLE IF EXISTS tFlightPassengers")
     sql = """CREATE TABLE tFlightPassengers(
                 id INTEGER NOT NULL PRIMARY KEY,
                 passengers TEXT);"""
     curs.execute(sql)
     curs.execute("DROP TABLE IF EXISTS tFlightSeats")
     sql = """CREATE TABLE tFlightSeats(
                 id INTEGER NOT NULL PRIMARY KEY,
                 seats TEXT);"""
     curs.execute(sql)
     curs.execute("DROP TABLE IF EXISTS tFlightFlights")
     sql = """CREATE TABLE tFlightFlights(
                 id INTEGER NOT NULL PRIMARY KEY,
                 flights TEXT);"""
     curs.execute(sql)
     curs.execute("DROP TABLE IF EXISTS tFlightDistance")
     sql = """CREATE TABLE tFlightDistance(
                 id INTEGER NOT NULL PRIMARY KEY,
                 distance TEXT);"""
     curs.execute(sql)
     curs.execute("DROP TABLE IF EXISTS tFlightPlaneInfo")
     sql = """CREATE TABLE tFlightPlaneInfo(
                 plane_id INTEGER NOT NULL PRIMARY KEY,
                 oAirport TEXT REFERENCES tFlightOrigAirport(orig airport),
                 month TEXT REFERENCES tFlightMonth(month),
                 day TEXT REFERENCES tFlightDay(day),
                 year TEXT REFERENCES tFlightYear(year),
                 dAirport TEXT REFERENCES tFlightDestAirport(dest_airport),
                 flights TEXT REFERENCES tFlightFlights(flights));"""
     curs.execute(sql)
     curs.execute("DROP TABLE IF EXISTS tFlightMonth")
     sql = """CREATE TABLE tFlightMonth(
                 id INTEGER NOT NULL PRIMARY KEY,
                 month TEXT)"""
     curs.execute(sql)
     curs.execute("DROP TABLE IF EXISTS tFlightDay")
     sql = """CREATE TABLE tFlightDay(
                 id INTEGER NOT NULL PRIMARY KEY,
                 day TEXT);"""
```

```
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tFlightYear")
sql = """CREATE TABLE tFlightYear(
           id INTEGER NOT NULL PRIMARY KEY,
           year TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tFlightDate")
sql = """CREATE TABLE tFlightDate(
           plane id INTEGER NOT NULL PRIMARY KEY REFERENCES
month TEXT REFERENCES tFlightMonth(month),
           day TEXT REFERENCES tFlightDay(day),
           year TEXT REFERENCES tFlightYear(year));"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tFlightOrigPopulation")
sql = """CREATE TABLE tFlightOrigPopulation(
           id INTEGER NOT NULL PRIMARY KEY,
           orig population TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tFlightOrigCity")
sql = """CREATE TABLE tFlightOrigCity(
           id INTEGER NOT NULL PRIMARY KEY,
           orig_city TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tFlightOrigState")
sql = """CREATE TABLE tFlightOrigState(
           id INTEGER NOT NULL PRIMARY KEY.
           orig_state TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tFlightOrigAirport")
sql = """CREATE TABLE tFlightOrigAirport(
           id INTEGER NOT NULL PRIMARY KEY,
           orig airport TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tFlightOrigAirportLat")
sql = """CREATE TABLE tFlightOrigAirportLat(
           id INTEGER NOT NULL PRIMARY KEY,
           orig_airportLat TEXT);"""
curs.execute(sql)
```

```
curs.execute("DROP TABLE IF EXISTS tFlightOrigAirportLong")
sql = """CREATE TABLE tFlightOrigAirportLong(
            id INTEGER NOT NULL PRIMARY KEY,
            orig_airportLong TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tFlightOrigAirportInfo")
sql = """CREATE TABLE tFlightOrigAirportInfo(
            plane id INTEGER NOT NULL PRIMARY KEY REFERENCES
orig_city TEXT REFERENCES tFlightOrigCity(orig_city),
            orig_state TEXT REFERENCES tFlightOrigState(orig_state),
            orig_airport TEXT REFERENCES tFlightOrigAirport(orig_airport),
            orig_airportLat TEXT REFERENCES_
→tFlightOrigAirportLat(orig_airportLat),
            orig_airportLong TEXT REFERENCES<sub>□</sub>
→tFlightOrigAirportLong(orig_airportLong))"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tFlightDestPopulation")
sql = """CREATE TABLE tFlightDestPopulation(
            id INTEGER NOT NULL PRIMARY KEY,
            dest population TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tFlightDestCity")
sql = """CREATE TABLE tFlightDestCity(
            id INTEGER NOT NULL PRIMARY KEY,
           dest city TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tFlightDestState")
sql = """CREATE TABLE tFlightDestState(
            id INTEGER NOT NULL PRIMARY KEY,
           dest_state TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tFlightDestAirport")
sql = """CREATE TABLE tFlightDestAirport(
            id INTEGER NOT NULL PRIMARY KEY,
            dest_airport TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tFlightDestAirportLat")
sql = """CREATE TABLE tFlightDestAirportLat(
            id INTEGER NOT NULL PRIMARY KEY,
            dest_airportLat TEXT);"""
```

```
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tFlightDestAirportLong")
sql = """CREATE TABLE tFlightDestAirportLong(
           id INTEGER NOT NULL PRIMARY KEY,
           dest_airportLong TEXT);"""
curs.execute(sql)
curs.execute("DROP TABLE IF EXISTS tFlightDestAirportInfo")
sql = """CREATE TABLE tFlightDestAirportInfo(
           plane_id INTEGER NOT NULL PRIMARY KEY REFERENCES_
dest_city TEXT REFERENCES tFlightDestCity(dest_city),
           dest_state TEXT REFERENCES tFlightDestState(dest_state),
           dest_airport TEXT REFERENCES tFlightDestAirport(dest_airport),
           dest_airportLat TEXT REFERENCES□

→tFlightDestAirportLat(dest_airportLat),
           dest_airportLong TEXT REFERENCES_
→tFlightDestAirportLong(dest_airportLong));"""
curs.execute(sql)
conn.commit()
# Turn on foreign key constraints
curs.execute("PRAGMA foreign_keys = on;")
conn.close()
```

[]: