

CIS4301 Assignment#4

Number 1:

```
CREATE TRIGGER validate_name BEFORE
INSERT ON SIGHTINGS
BEGIN
    SELECT CASE WHEN (
        SELECT (NEW.PERSON
            NOT IN (SELECT MEMBERS.NAME FROM MEMBERS))
    THEN RAISE (ABORT,
        'Error: Insert into the SIGHTINGS table references a person that is not found
in the database.')
    END;
END;
```

1. [NO ERRORS]  

```
INSERT INTO SIGHTINGS
VALUES ("Douglas dustymaiden", "Jennifer", "Double Mountain", "2008-11-28");
```
2. [NO ERRORS]  

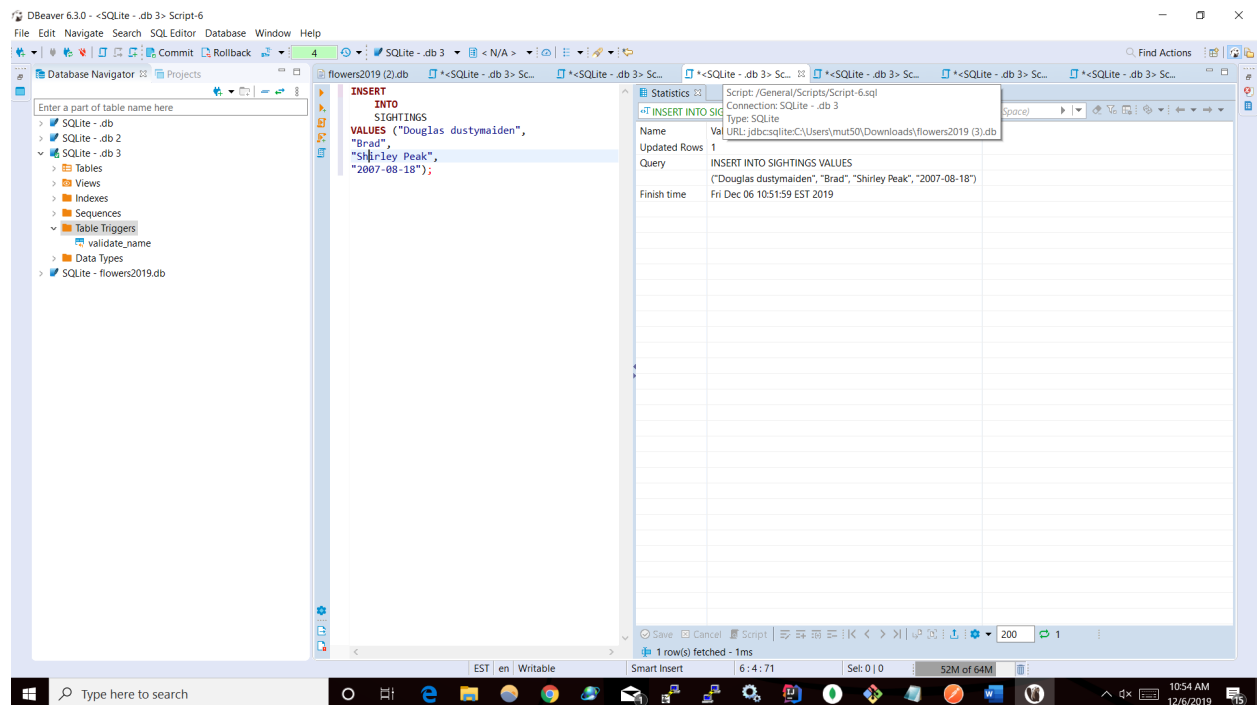
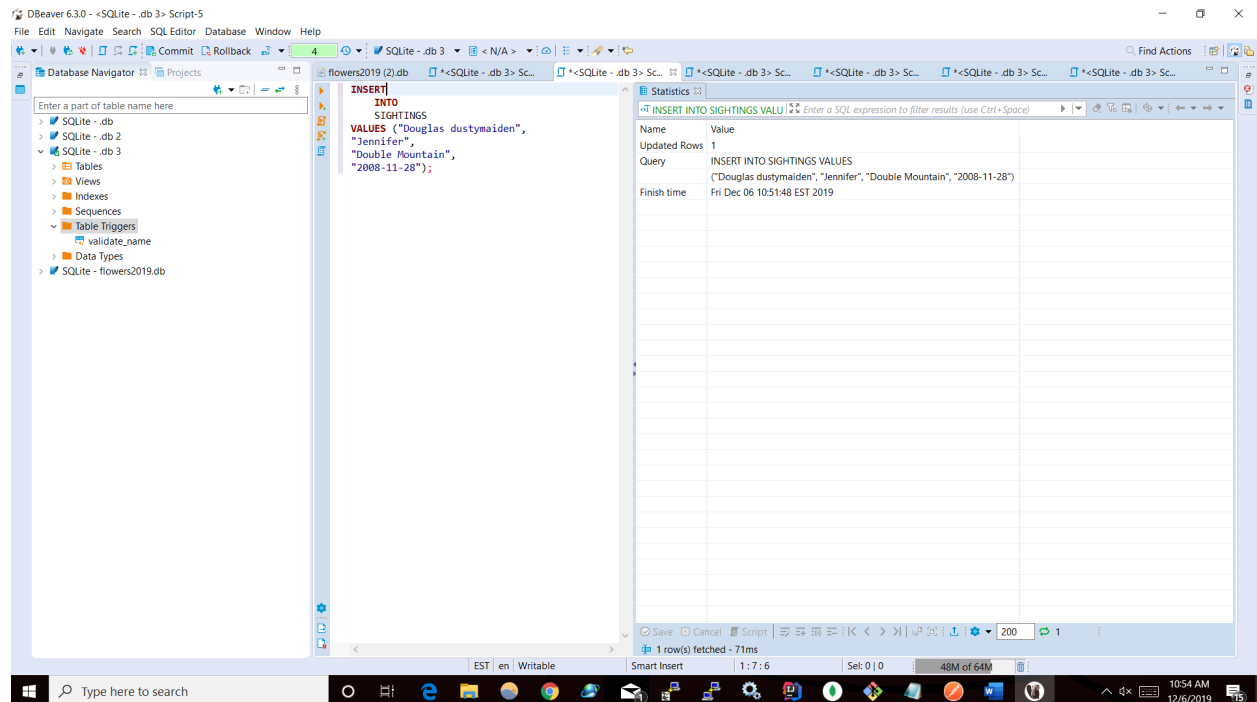
```
INSERT INTO SIGHTINGS
VALUES ("Douglas dustymaiden", "Brad", "Shirley Peak", "2007-08-18");
```
3. [NO ERRORS]  

```
INSERT INTO SIGHTINGS
VALUES ("Douglas dustymaiden", "Donna", "Grouse Meadow", "2011-11-28");
```
4. [NO ERRORS]  

```
INSERT INTO SIGHTINGS
VALUES ("Douglas dustymaiden", "Maria", "Grouse Meadow", "2014-08-16");
```
5. [SQL Error [19]: [SQLITE\_CONSTRAINT] Abort due to constraint violation  
(Error: Insert into the SIGHTINGS table references a person that is not found  
in the database.)]  

```
INSERT INTO SIGHTINGS
VALUES ("Douglas dustymaiden", "Joe", "Piute Peak", "2007-02-17");
```

```
SELECT *
FROM SIGHTINGS
WHERE PERSON = "Jennifer"
OR PERSON = "Brad"
OR PERSON = "Donna"
OR PERSON = "Maria"
OR PERSON = "Joe";
SELECT *
FROM MEMBERS
WHERE MEMBERSINCE IS NULL;
```



DBeaver 6.3.0 - <SQLite - .db 3> Script-7

File Edit Navigate Search SQL Editor Database Window Help

Database Navigator Projects

Enter a part of table name here

- SQLite - .db
- SQLite - .db 2
- SQLite - .db 3
  - Tables
  - Views
  - Indexes
  - Sequences
  - Table Triggers
    - validate\_name
  - Data Types
- SQLite - flowers2019.db

flowers2019 (2).db

```
INSERT INTO SIGHTINGS VALUES ("Douglas dustymaiden", "Donna", "Grouse Meadow", "2011-11-28");
```

Statistics

Name	Value
Updated Rows	1
Query	INSERT INTO SIGHTINGS VALUES ("Douglas dustymaiden", "Donna", "Grouse Meadow", "2011-11-28")
Finish time	Fri Dec 06 10:52:11 EST 2019

Script: /General/Scripts/Script-7.sql  
Connection: SQLite - .db 3  
Type: SQLite  
URL: jdbc:sqlite:C:\Users\mut50\Downloads\flowers2019 (3).db

Save Cancel Script

1 row(s) fetched - 1ms

DBeaver 6.3.0 - <SQLite - .db 3> Script-8

File Edit Navigate Search SQL Editor Database Window Help

Database Navigator Projects

Enter a part of table name here

- SQLite - .db
- SQLite - .db 2
- SQLite - .db 3
  - Tables
  - Views
  - Indexes
  - Sequences
  - Table Triggers
    - validate\_name
  - Data Types
- SQLite - flowers2019.db

flowers2019 (2).db

```
INSERT INTO SIGHTINGS VALUES ("Douglas dustymaiden", "Maria", "Grouse Meadow", "2014-08-16");
```

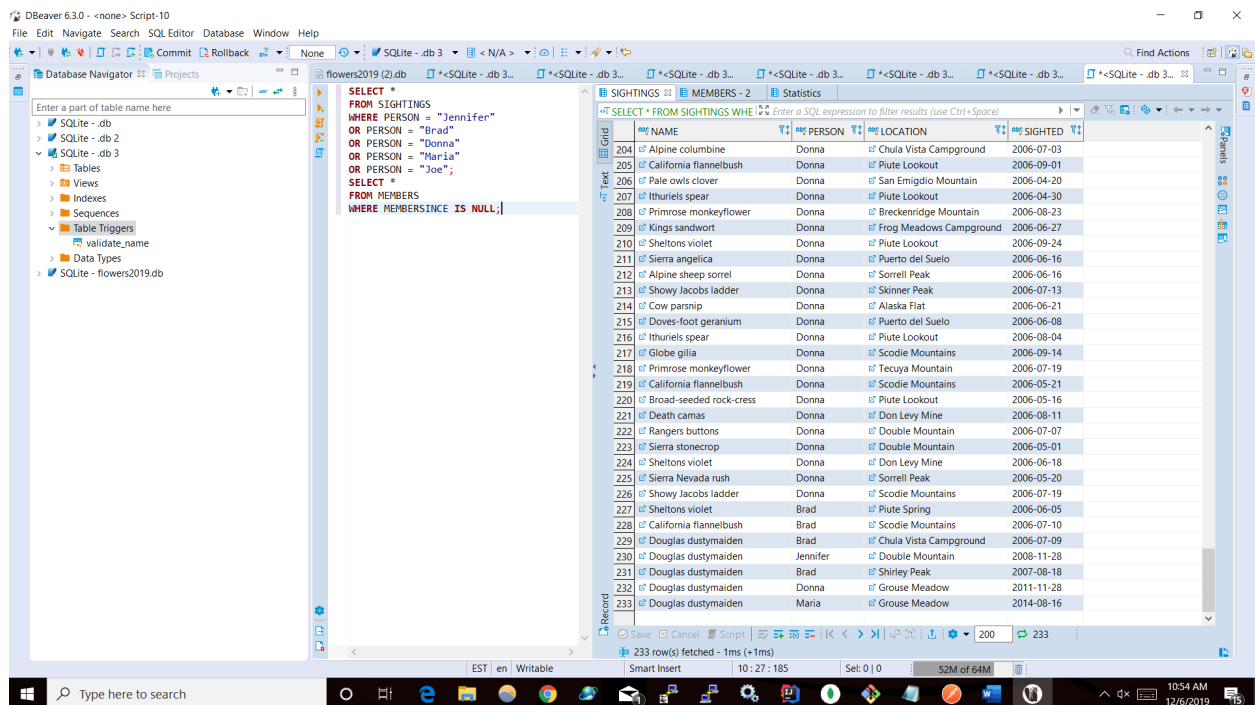
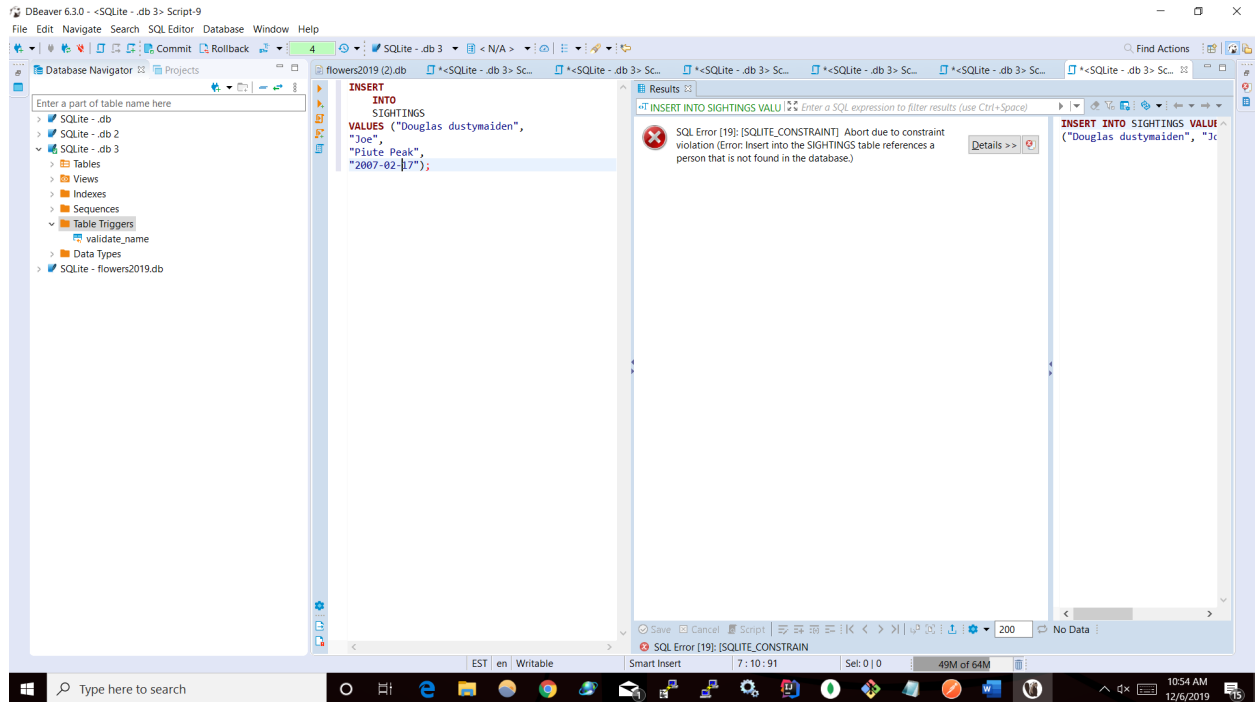
Statistics

Name	Value
Updated Rows	1
Query	INSERT INTO SIGHTINGS VALUES ("Douglas dustymaiden", "Maria", "Grouse Meadow", "2014-08-16")
Finish time	Fri Dec 06 10:52:22 EST 2019

Script: /General/Scripts/Script-8.sql  
Connection: SQLite - .db 3  
Type: SQLite  
URL: jdbc:sqlite:C:\Users\mut50\Downloads\flowers2019 (3).db

Save Cancel Script

1 row(s) fetched - 0ms



TASK 2:

```
CREATE TRIGGER validate_nameInsertionTry
BEFORE INSERT ON SIGHTINGS
WHEN (SELECT NEW.PERSON NOT IN (SELECT MEMBERS.NAME FROM MEMBERS))
BEGIN
    INSERT INTO MEMBERS
    VALUES(NEW.PERSON,NULL,1);
END;
```

1. [NO ERRORS]  

```
INSERT INTO SIGHTINGS
VALUES ("Douglas dustymaiden", "Jennifer", "Double Mountain", "2008-11-28");
```
2. [NO ERRORS]  

```
INSERT INTO SIGHTINGS
VALUES ("Douglas dustymaiden", "Brad", "Shirley Peak", "2007-08-18");
```
3. [NO ERRORS]  

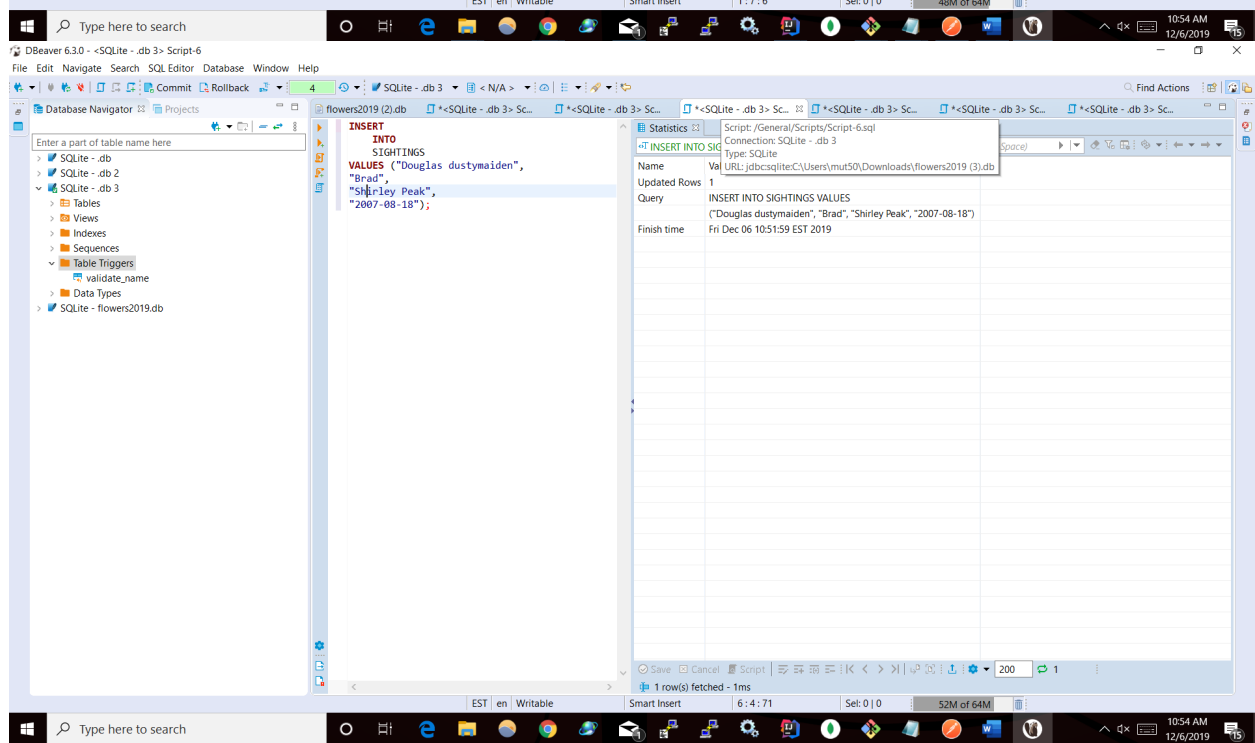
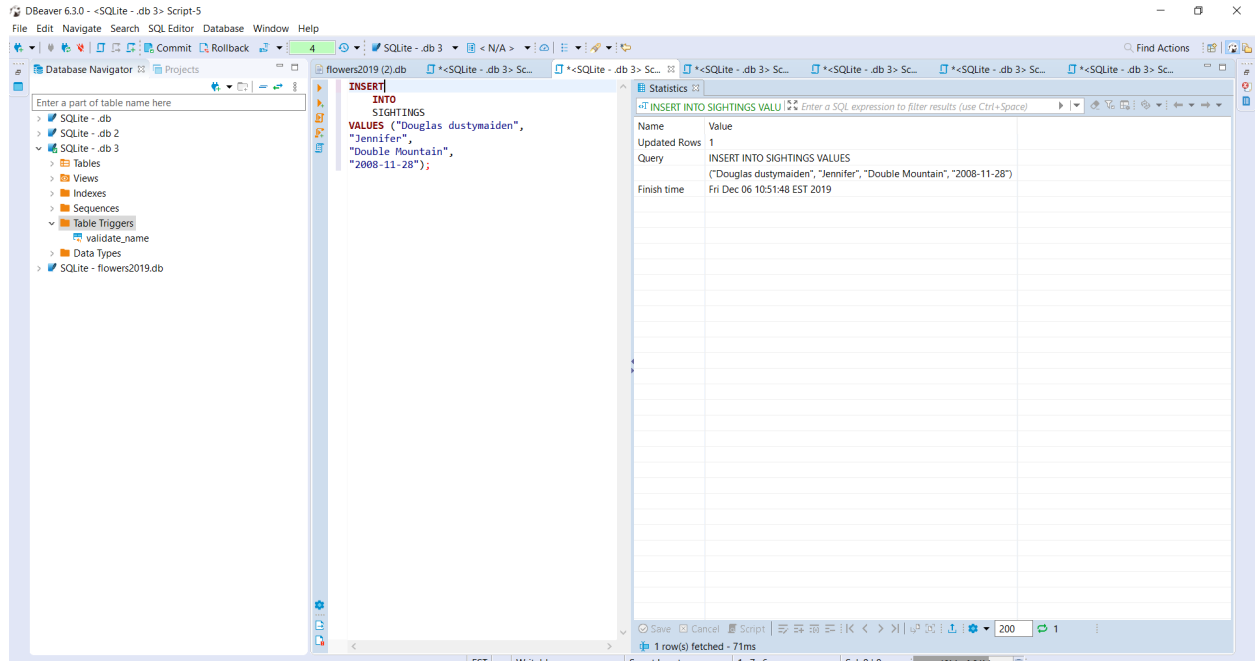
```
INSERT INTO SIGHTINGS
VALUES ("Douglas dustymaiden", "Donna", "Grouse Meadow", "2011-11-28");
```
4. [NO ERRORS]  

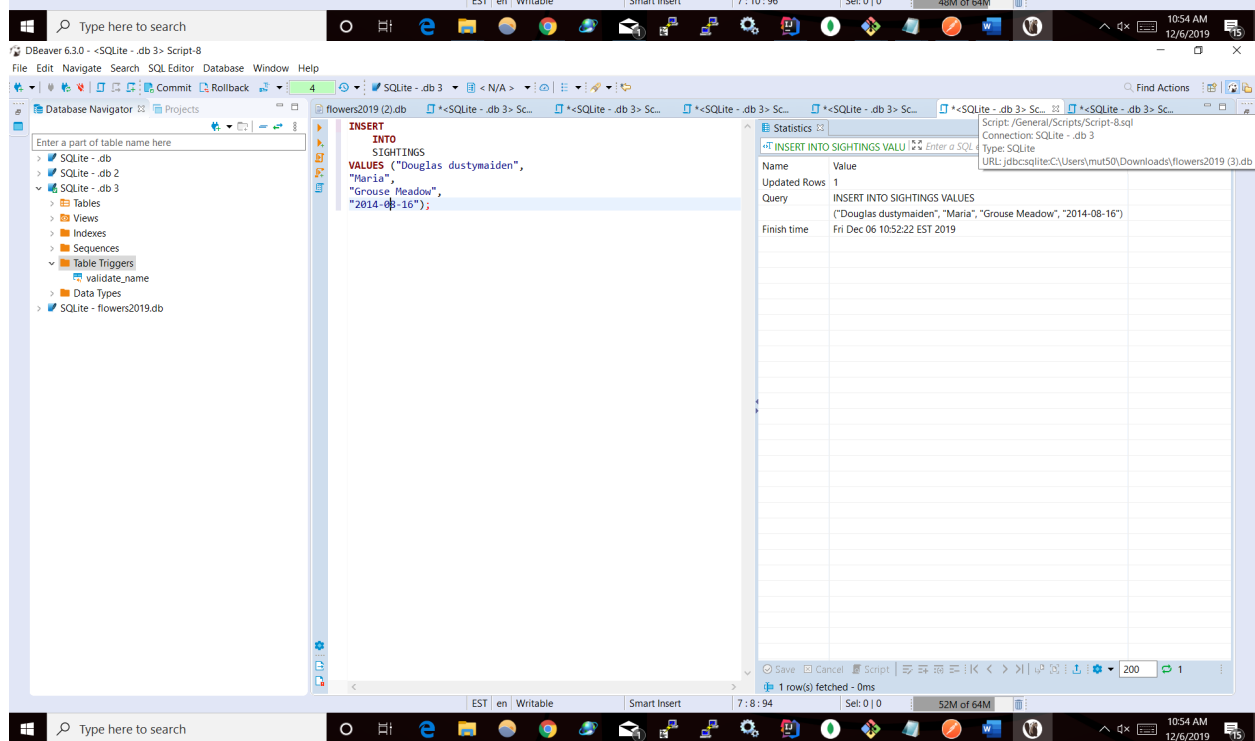
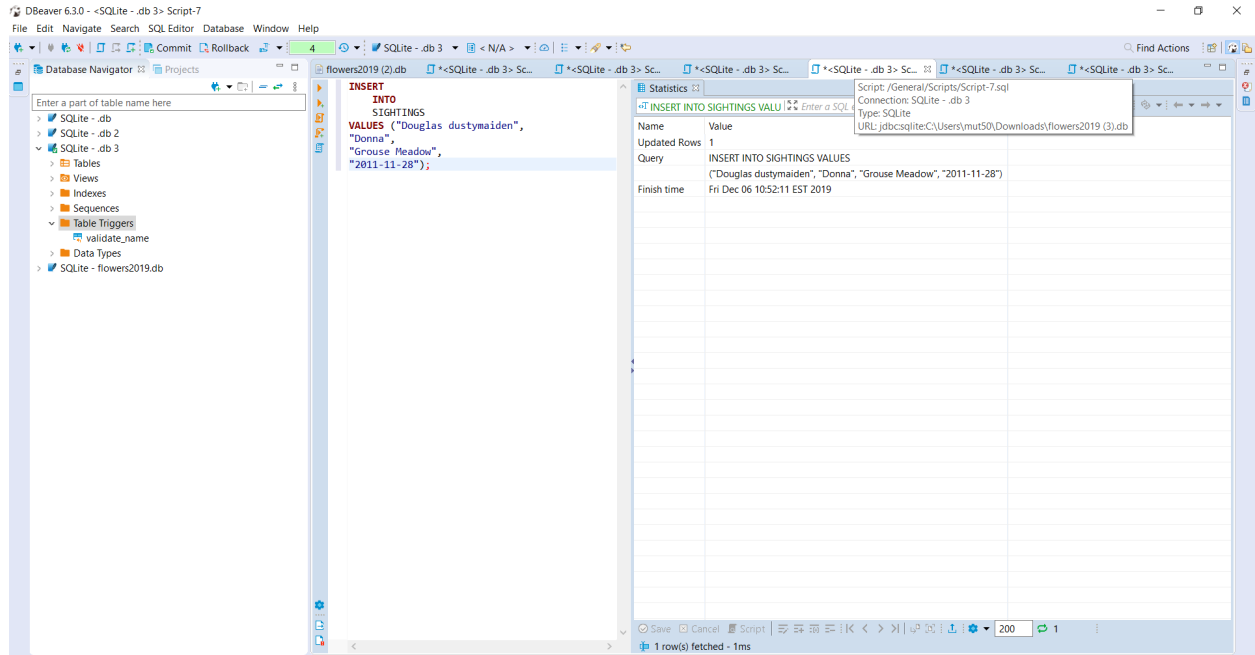
```
INSERT INTO SIGHTINGS
VALUES ("Douglas dustymaiden", "Maria", "Grouse Meadow", "2014-08-16");
```
5. [NO ERRORS]  

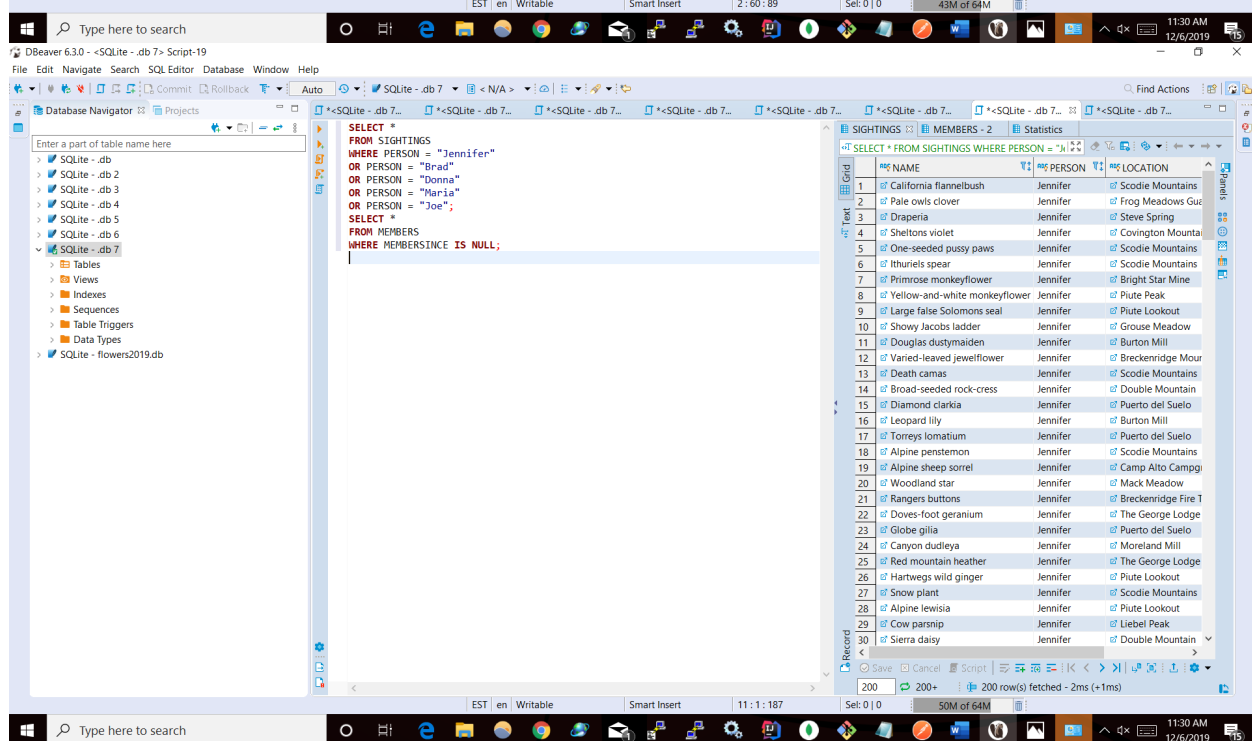
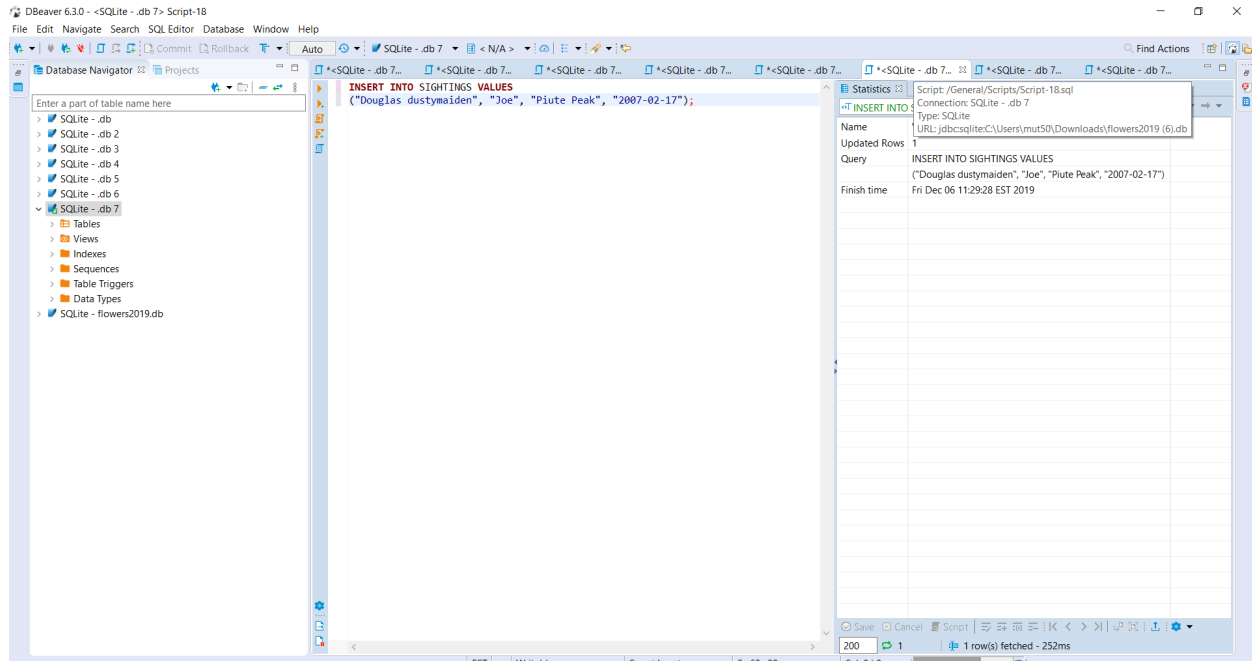
```
INSERT INTO SIGHTINGS
VALUES ("Douglas dustymaiden", "Joe", "Piute Peak", "2007-02-17");
```

```
SELECT *
FROM SIGHTINGS
WHERE PERSON = "Jennifer"
OR PERSON = "Brad"
OR PERSON = "Donna"
OR PERSON = "Maria"
OR PERSON = "Joe";
SELECT *
FROM MEMBERS
WHERE MEMBERSINCE IS NULL;
```

```
//Ran separately
SELECT *
FROM MEMBERS
```









DBeaver 6.3.0 - <SQLite - .db 7> Script-20

File Edit Navigate Search SQL Editor Database Window Help

Database Navigator Projects

Enter a part of table name here

- > SQLite - .db
- > SQLite - .db 2
- > SQLite - .db 3
- > SQLite - .db 4
- > SQLite - .db 5
- > SQLite - .db 6
- > **SQLite - .db 7**
  - > Tables
  - > Views
  - > Indexes
  - > Sequences
  - > Table Triggers
  - > Data Types
- > SQLite - flowers2019.db

SQL Editor

```
SELECT *
FROM MEMBERS
WHERE MEMBERSINCE IS NULL;
```

Find Actions

MEMBERS

	MEMBERS NAME	MEMBERSINCE	NUMSIGHTINGS
1	Joe	[NULL]	1

200 1 1 row(s) fetched - 1ms

DBeaver 6.3.0 - <SQLite - .db 7> Script-20

File Edit Navigate Search SQL Editor Database Window Help

Database Navigator Projects

Enter a part of table name here

- > SQLite - .db
- > SQLite - .db 2
- > SQLite - .db 3
- > SQLite - .db 4
- > SQLite - .db 5
- > SQLite - .db 6
- > **SQLite - .db 7**
  - > Tables
  - > Views
  - > Indexes
  - > Sequences
  - > Table Triggers
  - > Data Types
- > SQLite - flowers2019.db

SQL Editor

```
SELECT *
FROM MEMBERS
```

Find Actions

MEMBERS

	MEMBERS NAME	MEMBERSINCE	NUMSIGHTINGS
1	Brad	2006-06-05	3
2	Donna	2006-04-20	23
3	Helen	2006-04-13	43
4	James	2006-04-19	22
5	Jennifer	2006-04-16	128
6	John	2006-05-02	16
7	Maria	2006-04-02	75
8	Michael	2006-04-01	59
9	Pete	2006-06-04	6
10	Robert	2006-05-01	15
11	Sandra	2006-05-01	26
12	Tim	2006-05-08	10
13	Joe	[NULL]	1

200 13 13 row(s) fetched - 1ms

### TASK 3:

```
CREATE TRIGGER flowerNames BEFORE
INSERT on SIGHTINGS WHEN substr(NEW.name, 0, instr(NEW.name," ")) IN (Select genus
from FLOWERS)
BEGIN INSERT INTO
    SIGHTINGS(name, person, location, sighted)
VALUES((SELECT comname FROM FLOWERS where genus || ' ' || species = NEW.name),
NEW.person, NEW.location, NEW.sighted);

SELECT case WHEN substr(NEW.name, 0, instr(NEW.name, " ")) IN (Select genus from
FLOWERS) THEN RAISE(FAIL,
    'Warning: the flower name you entered is not a common flower name.')
END;
END;
```

1. [NO ERRORS]  
**INSERT INTO** SIGHTINGS **VALUES**  
("Sky pilot", "Person X", "Grouse Meadow", "2006-08-18");
2. [NO ERRORS]  
**INSERT INTO** SIGHTINGS **VALUES**("Hoar buckwheat", "Person X", "Grouse Meadow",  
"2006-08-18");
3. [WARNING: SQL Error [19]: [SQLITE\_CONSTRAINT] Abort due to constraint  
violation (Warning: the flower name you entered is not a common flower name.)]  
**INSERT INTO** SIGHTINGS **VALUES**  
("Zigadenus venenosus", "Person X", "Grouse Meadow", "2006-08-18");
4. [WARNING: SQL Error [19]: [SQLITE\_CONSTRAINT] Abort due to constraint  
violation (Warning: the flower name you entered is not a common flower name.)]  
**INSERT INTO** SIGHTINGS **VALUES**  
("Carex limosa", "Person Y", "Grouse Meadow", "2006-08-18");
5. [NO ERRORS]  
**INSERT INTO** SIGHTINGS **VALUES**  
("Draperia", "Person Z", "Grouse Meadow", "2006-08-18");

```
SELECT *
FROM SIGHTINGS
WHERE PERSON = "Person X"
OR PERSON = "Person Y"
OR PERSON = "Person Z";
```

DBeaver 6.3.0 - <SQLite - .db 16> Script-22

File Edit Navigate Search SQL Editor Database Window Help

Enter a part of table name here

- SQLite - .db
- SQLite - .db 10
- SQLite - .db 11
- SQLite - .db 12
- SQLite - .db 13
- SQLite - .db 14
- SQLite - .db 15
- SQLite - .db 16
- SQLite - .db 2
- SQLite - .db 3
- SQLite - .db 4
- SQLite - .db 5
- SQLite - .db 6
- SQLite - .db 7
- SQLite - .db 8
- SQLite - .db 9
- SQLite - flowers2019.db

```
CREATE TRIGGER flowerNames BEFORE
INSERT
on
SIGHTINGS
WHEN substr(NEW.name,
0,
instr(NEW.name,
" ")) IN (
Select
genus
from
FLOWERS)
BEGIN
INSERT
INTO
SIGHTINGS(name,
person,
location,
sighted)
VALUES(
SELECT
comname
FROM
FLOWERS
where
genus || ' ' || species = NEW.name),
NEW.person,
NEW.location,
NEW.sighted);
SELECT
case
when substr(NEW.name,
0,
instr(NEW.name,
" ")) IN (
Select
genus
from
FLOWERS) THEN RAISE(FAIL,
'Warning: the flower name you entered is not a common flower name.')
END;
END;
```

Statistics

CREATE TRIGGER flowerNa

Name	Value
Updated Rows	0

Query

```
CREATE TRIGGER flowerNames BEFORE
INSERT
on
SIGHTINGS
WHEN substr(NEW.name,
0,
instr(NEW.name,
" ")) IN (
Select
genus
from
FLOWERS)
BEGIN
INSERT
INTO
SIGHTINGS(name,
person,
location,
sighted)
VALUES(
SELECT
comname
FROM
FLOWERS
where
genus || ' ' || species = NEW.name),
NEW.person,
NEW.location,
NEW.sighted);
SELECT
```

1 row(s) fetched - 152ms

DBeaver 6.3.0 - <SQLite - .db 16> Script-27

File Edit Navigate Search SQL Editor Database Window Help

Enter a part of table name here

- SQLite - .db
- SQLite - .db 10
- SQLite - .db 11
- SQLite - .db 12
- SQLite - .db 13
- SQLite - .db 14
- SQLite - .db 15
- SQLite - .db 16
- SQLite - .db 2
- SQLite - .db 3
- SQLite - .db 4
- SQLite - .db 5
- SQLite - .db 6
- SQLite - .db 7
- SQLite - .db 8
- SQLite - .db 9
- SQLite - flowers2019.db

```
INSERT INTO SIGHTINGS VALUES
("Sky pilot", "Person X", "Grouse Meadow", "2006-08-18");
```

Statistics

INSERT INTO SIGHTINGS V

Name	Value
Updated Rows	1

Query

```
INSERT INTO SIGHTINGS VALUES
("Sky pilot", "Person X", "Grouse Meadow", "2006-08-18")
```

Finish time

Fri Dec 06 14:16:20 EST 2019

1 row(s) fetched - 231ms

DBeaver 6.3.0 - <SQLite - .db 16> Script-28

File Edit Navigate Search SQL Editor Database Window Help

Commit Rollback Auto SQLite - .db 16 < N/A >

Find Actions

Enter a part of table name here

- SQLite - .db
- SQLite - .db 10
- SQLite - .db 11
- SQLite - .db 12
- SQLite - .db 13
- SQLite - .db 14
- SQLite - .db 15
- SQLite - .db 16
- SQLite - .db 2
- SQLite - .db 3
- SQLite - .db 4
- SQLite - .db 5
- SQLite - .db 6
- SQLite - .db 7
- SQLite - .db 8
- SQLite - .db 9
- SQLite - flowers2019.db

INSERT INTO SIGHTINGS VALUES  
("Hoar buckwheat", "Person X", "Grouse Meadow", "2006-08-18");

Statistics

Name	Value
Updated Rows	1
Query	INSERT INTO SIGHTINGS VALUES ("Hoar buckwheat", "Person X", "Grouse Meadow", "2006-08-18")
Finish time	Fri Dec 06 14:16:27 EST 2019

1 row(s) fetched - 204ms

DBeaver 6.3.0 - <SQLite - .db 16> Script-29

File Edit Navigate Search SQL Editor Database Window Help

Commit Rollback Auto SQLite - .db 16 < N/A >

Find Actions

Enter a part of table name here

- SQLite - .db
- SQLite - .db 10
- SQLite - .db 11
- SQLite - .db 12
- SQLite - .db 13
- SQLite - .db 14
- SQLite - .db 15
- SQLite - .db 16
- SQLite - .db 2
- SQLite - .db 3
- SQLite - .db 4
- SQLite - .db 5
- SQLite - .db 6
- SQLite - .db 7
- SQLite - .db 8
- SQLite - .db 9
- SQLite - flowers2019.db

INSERT INTO SIGHTINGS VALUES  
("Zigadenus venenosus", "Person X", "Grouse Meadow", "2006-08-18");

Results

SQL Error [19]: [SQLITE\_CONSTRAINT] Abort due to constraint violation (Warning: the flower name you entered is not a common flower name.)

SQL Error [19]: [SQLITE\_CONSTRAINT]

No Data

DBeaver 6.3.0 - <SQLite - .db 16> Script-30

File Edit Navigate Search SQL Editor Database Window Help

Commit Rollback Auto SQLite - .db 16 < N/A >

Find Actions

Enter a part of table name here

- SQLite - .db
- SQLite - .db 10
- SQLite - .db 11
- SQLite - .db 12
- SQLite - .db 13
- SQLite - .db 14
- SQLite - .db 15
- SQLite - .db 16
- SQLite - .db 2
- SQLite - .db 3
- SQLite - .db 4
- SQLite - .db 5
- SQLite - .db 6
- SQLite - .db 7
- SQLite - .db 8
- SQLite - .db 9
- SQLite - flowers2019.db

```
INSERT INTO SIGHTINGS VALUES
("Carex limosa", "Person Y", "Grouse Meadow", "2006-08-18");
```

Results

SQL Error [19]: [SQLITE\_CONSTRAINT] Abort due to constraint violation (Warning: the flower name you entered is not a common flower name.)

Save Cancel Script 200 No Data

EST en Writable Smart Insert 2:61:90 Set: 0 | 0 SIM of 64M

DBeaver 6.3.0 - <SQLite - .db 16> Script-31

File Edit Navigate Search SQL Editor Database Window Help

Commit Rollback Auto SQLite - .db 16 < N/A >

Find Actions

Enter a part of table name here

- SQLite - .db
- SQLite - .db 10
- SQLite - .db 11
- SQLite - .db 12
- SQLite - .db 13
- SQLite - .db 14
- SQLite - .db 15
- SQLite - .db 16
- SQLite - .db 2
- SQLite - .db 3
- SQLite - .db 4
- SQLite - .db 5
- SQLite - .db 6
- SQLite - .db 7
- SQLite - .db 8
- SQLite - .db 9
- SQLite - flowers2019.db

```
INSERT INTO SIGHTINGS VALUES
("Draperia", "Person Z", "Grouse Meadow", "2006-08-18");
```

Statistics

Name	Value
Updated Rows	1
Query	INSERT INTO SIGHTINGS VALUES ("Draperia", "Person Z", "Grouse Meadow", "2006-08-18")
Finish time	Fri Dec 06 14:16:55 EST 2019

1 row(s) fetched - 137ms

EST en Writable Smart Insert 2:57:86 Set: 0 | 0 SIM of 64M

DBeaver 6.3.0 - <SQLite - .db 16> Script-32

File Edit Navigate Search SQL Editor Database Window Help

Commit Rollback Auto SQLite - .db 16 < N/A >

Find Actions

Enter a part of table name here

- SQLite - .db
- SQLite - .db 10
- SQLite - .db 11
- SQLite - .db 12
- SQLite - .db 13
- SQLite - .db 14
- SQLite - .db 15
- SQLite - .db 16
- SQLite - .db 2
- SQLite - .db 3
- SQLite - .db 4
- SQLite - .db 5
- SQLite - .db 6
- SQLite - .db 7
- SQLite - .db 8
- SQLite - .db 9
- SQLite - flowers2019.db

```
SELECT *
FROM SIGHTINGS
WHERE PERSON = "Person X"
OR PERSON = "Person Y"
OR PERSON = "Person Z";
```

SIGHTINGS

Enter a SQL expression to filter results (use Ctrl+Sp)

	NAME	PERSON	LOCATION	SIGHTED
1	Say point	Person X	Grouse Meadow	2006-08-18
2	Hoar buckwheat	Person X	Grouse Meadow	2006-08-18
3	Death camas	Person X	Grouse Meadow	2006-08-18
4	Mud sedge	Person Y	Grouse Meadow	2006-08-18
5	Draperia	Person Z	Grouse Meadow	2006-08-18

Save Cancel Script

5 row(s) fetched - 1ms

EST en Writable Smart Insert 1 : 5 : 4 Set: 0 | 0 52M of 64M

Type here to search

2:17 PM 12/6/2019