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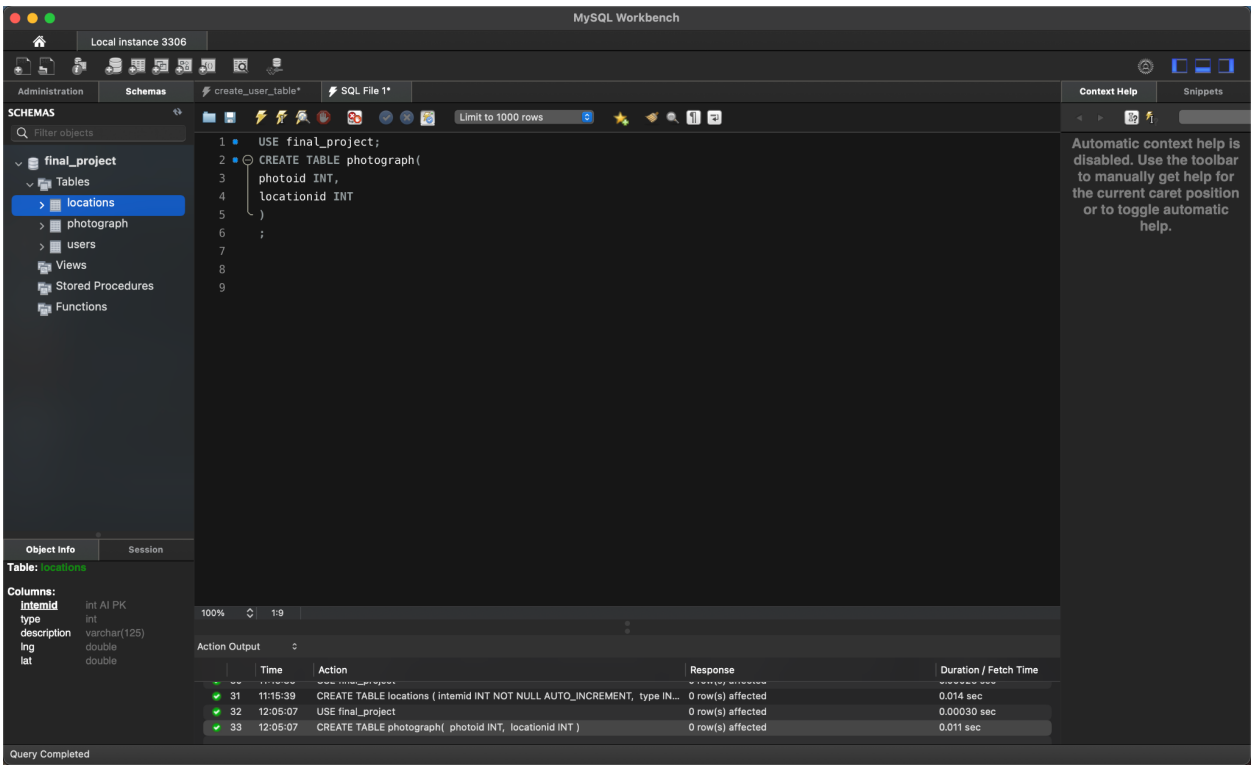
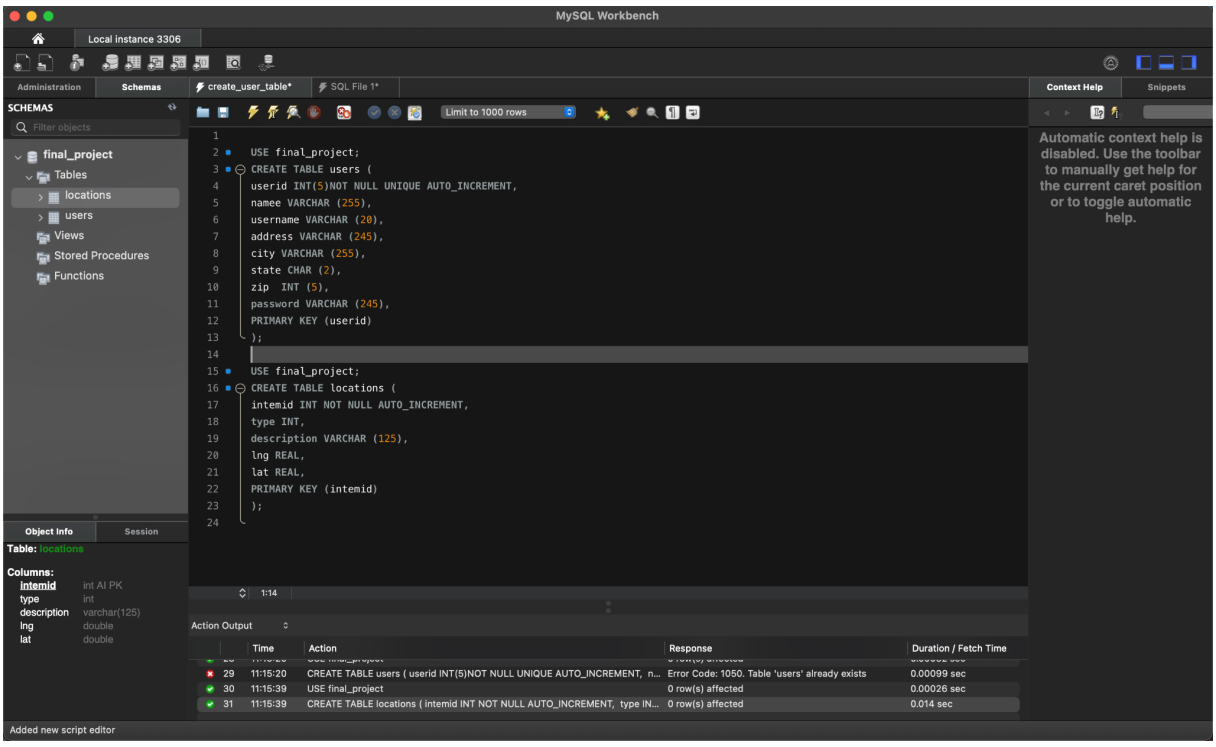
CS 303 Final
10/15/22

PROMPT 1



PROMPT 2

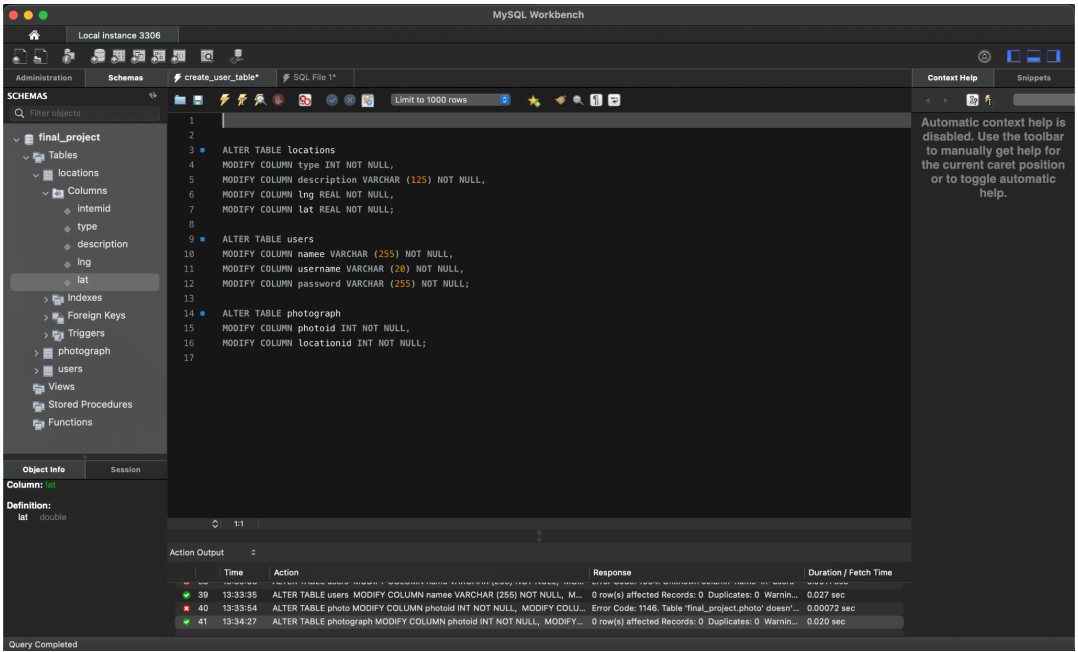


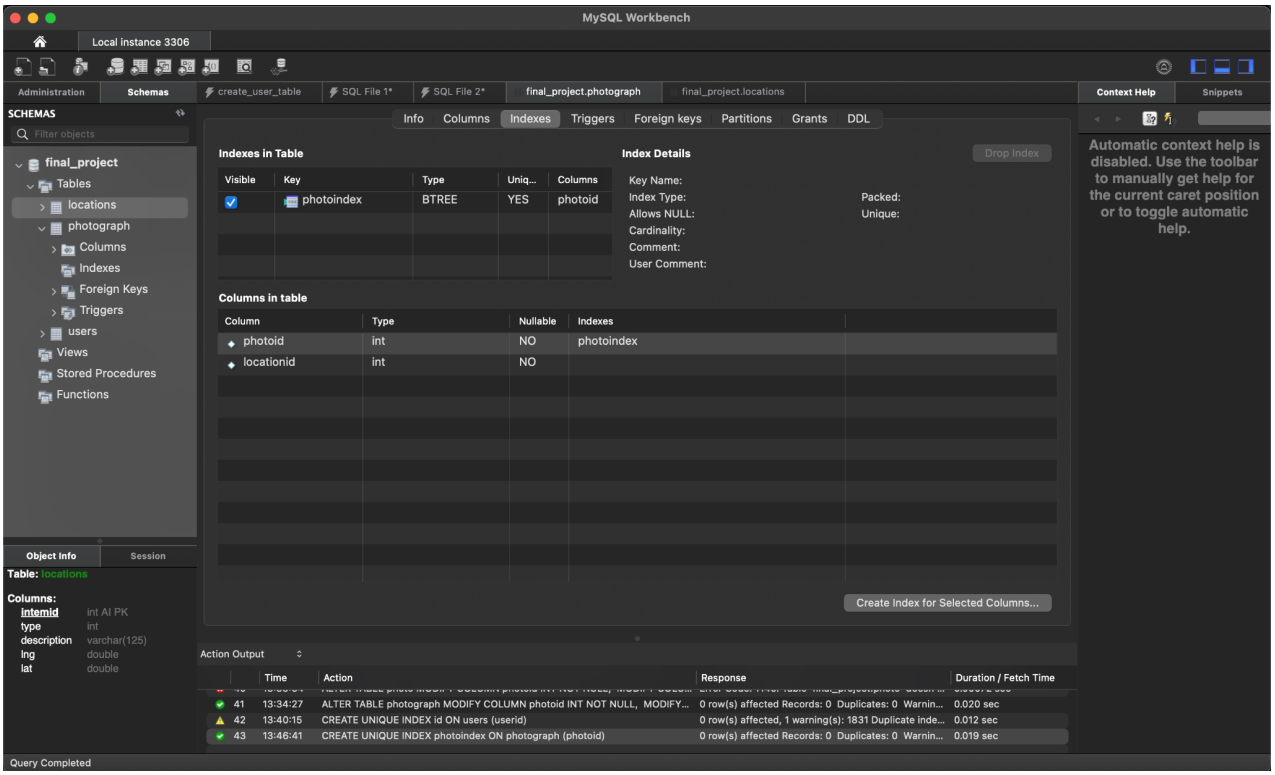
```
USE final_project;
CREATE TABLE photograph(
photoid INT,
locationid INT
)
;
```

```
USE final_project;
CREATE TABLE users (
userid INT(5) NOT NULL UNIQUE AUTO_INCREMENT,
namee VARCHAR (255),
username VARCHAR (20),
address VARCHAR (245),
city VARCHAR (255),
state CHAR (2),
zip  INT (5),
password VARCHAR (245),
PRIMARY KEY (userid)
);
```

```
USE final_project;
CREATE TABLE locations (
intemid INT NOT NULL AUTO_INCREMENT,
type INT,
description VARCHAR (125),
lng REAL,
lat REAL,
PRIMARY KEY (intemid)
);
```

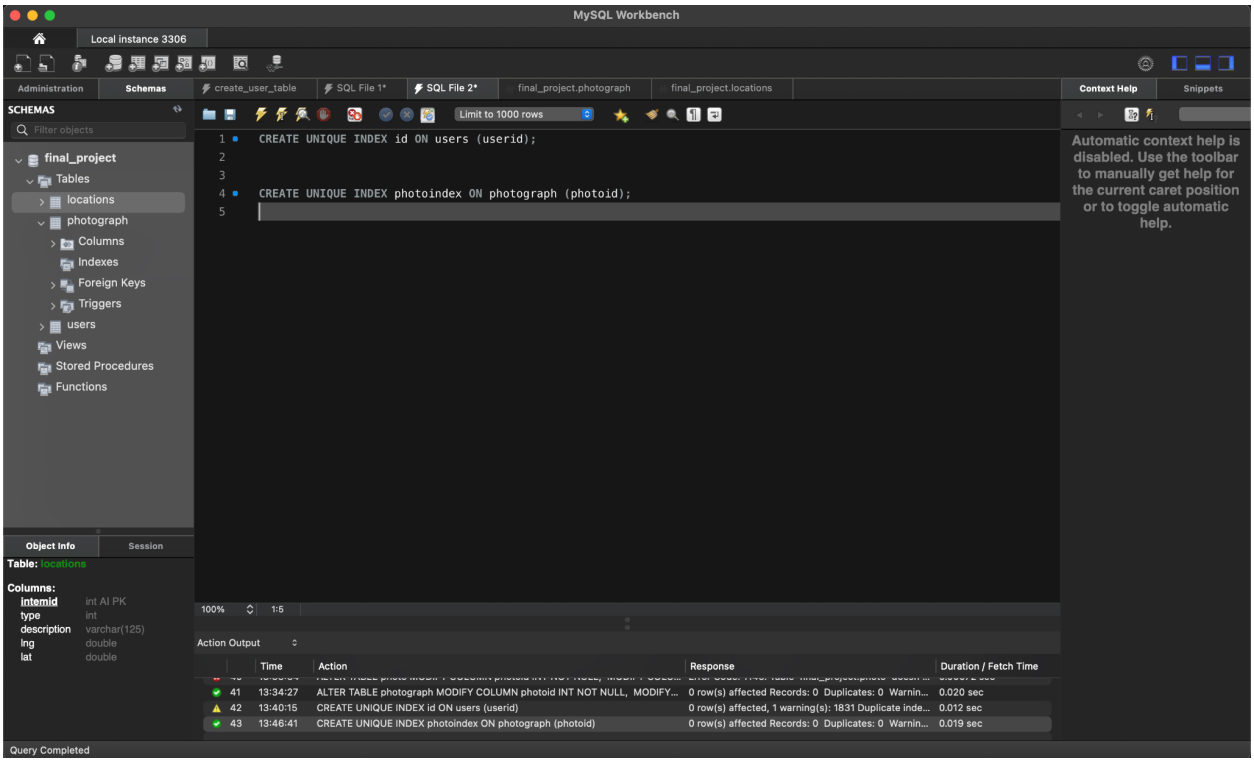
PROMPT 3 - ALTER TABLE





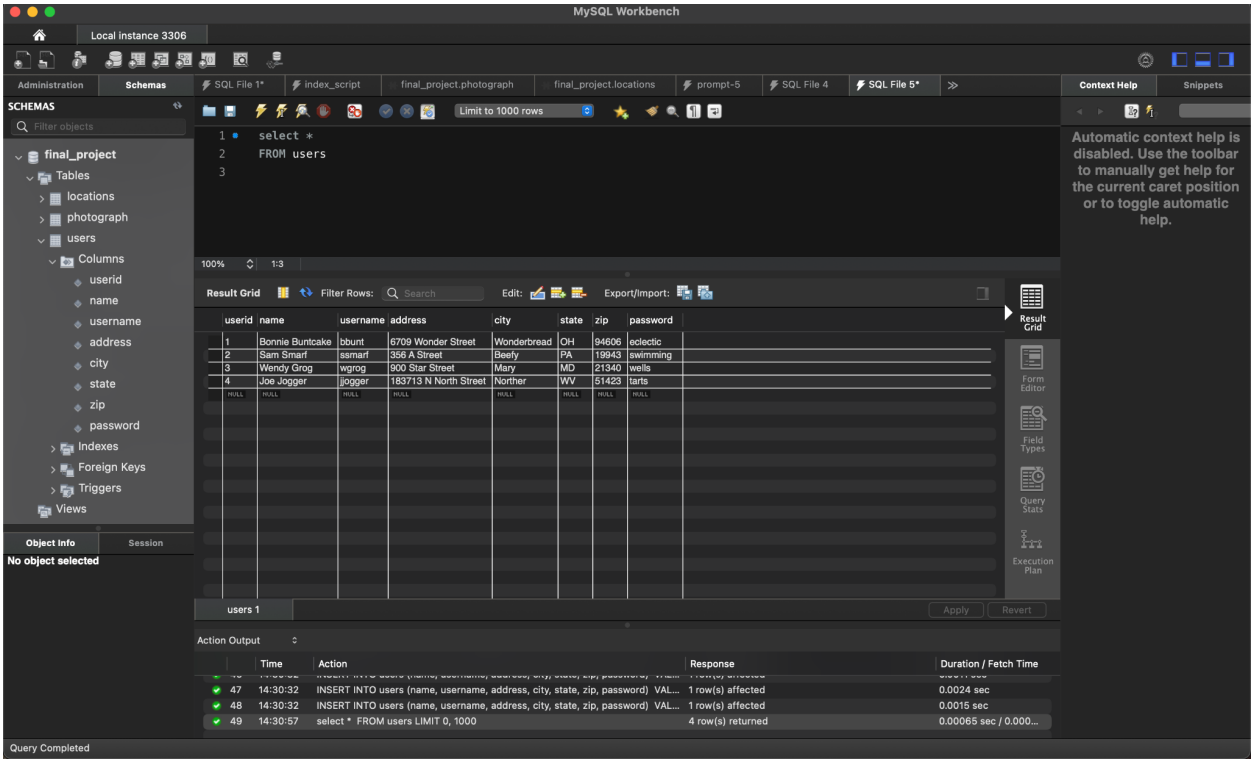

```
ALTER TABLE locations
MODIFY COLUMN type INT NOT NULL,
MODIFY COLUMN description VARCHAR (125) NOT NULL,
MODIFY COLUMN lng REAL NOT NULL,
MODIFY COLUMN lat REAL NOT NULL;

ALTER TABLE users
MODIFY COLUMN namee VARCHAR (255) NOT NULL,
MODIFY COLUMN username VARCHAR (20) NOT NULL,
MODIFY COLUMN password VARCHAR (255) NOT NULL;

ALTER TABLE photograph
MODIFY COLUMN photoid INT NOT NULL,
MODIFY COLUMN locationid INT NOT NULL;
```

Prompt 4 - Create Index



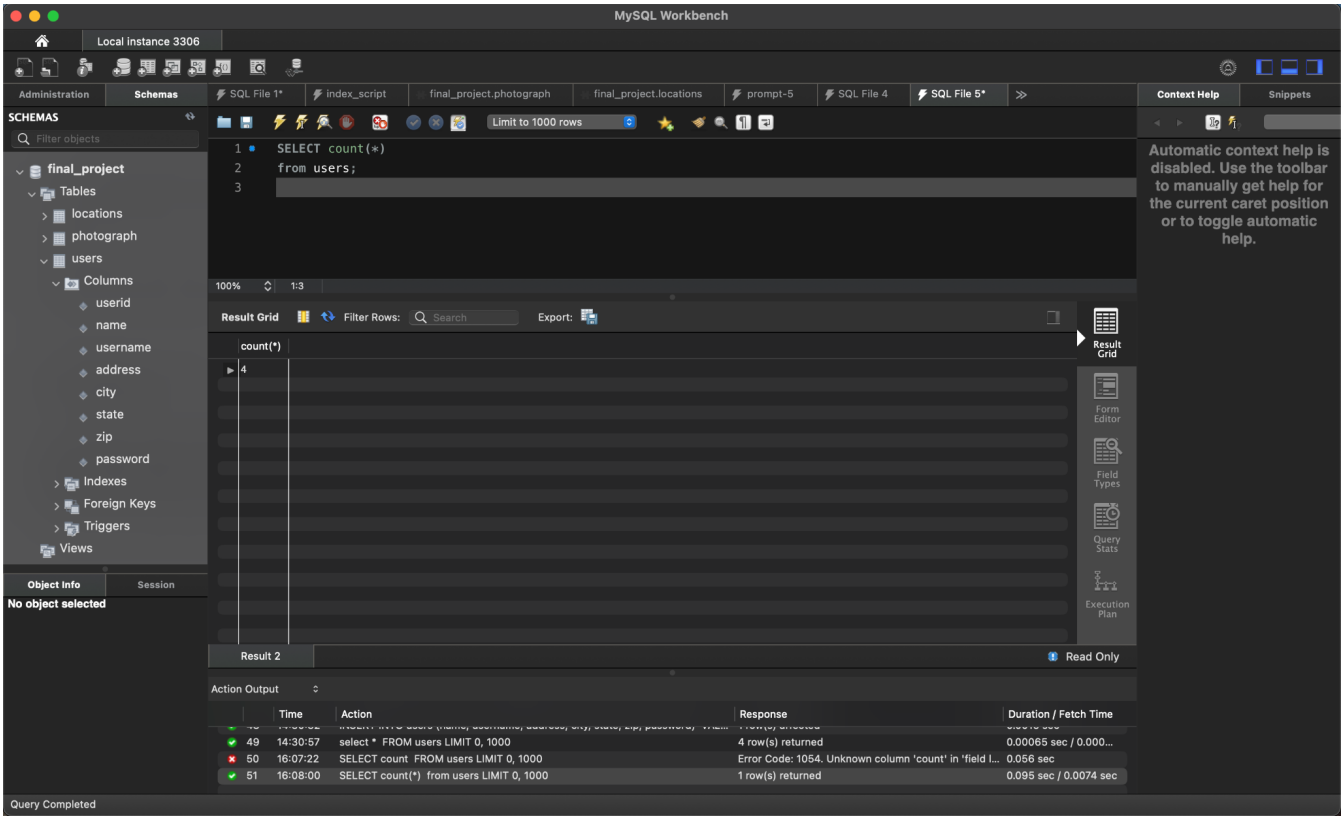
CREATE UNIQUE INDEX id ON users (userid);
CREATE UNIQUE INDEX photoindex ON photograph (photoid);

PROMPT 5



```
INSERT INTO users (name, username, address, city, state, zip, password)
VALUES ('Bonnie Buntcake', 'bbunt', '6709 Wonder Street','Wonderbread','OH','94606','eclectic'
)
;
INSERT INTO users (name, username, address, city, state, zip, password)
VALUES ('Sam Smarf', 'ssmarf','356 A Street','Beefy','PA','19943','swimming')

;
INSERT INTO users (name, username, address, city, state, zip, password)
VALUES ('Wendy Grog','wgrog','900 Star Street','Mary','MD','21340','wells')

;
INSERT INTO users (name, username, address, city, state, zip, password)
VALUES ('Joe Jogger','jjogger','183713 N North Street','Norther','WV','51423','tarts')
;
```

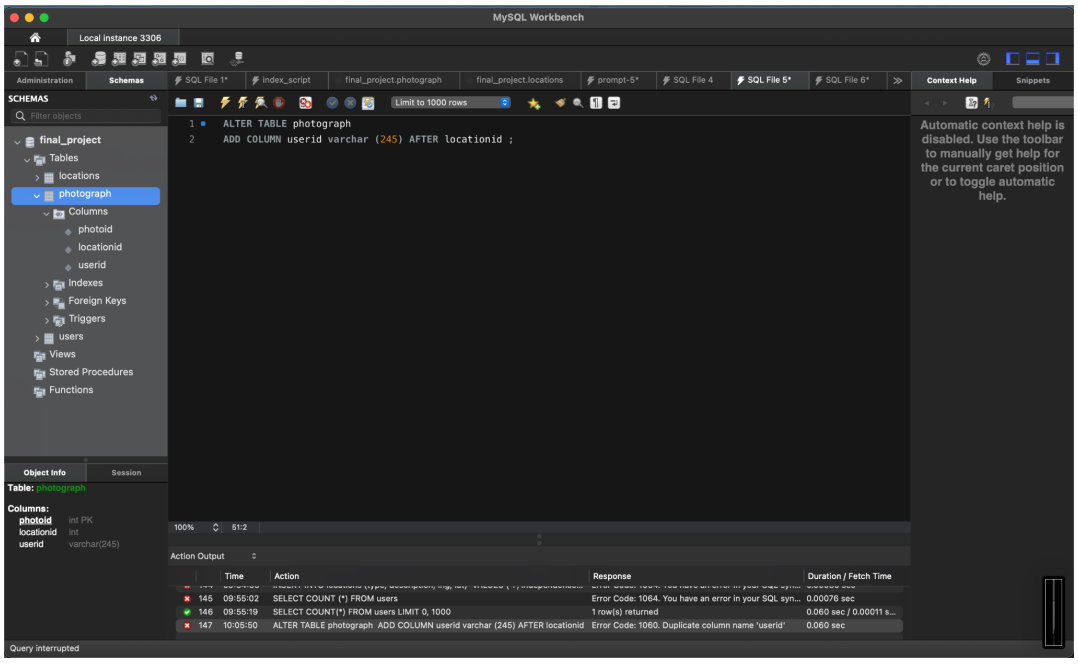
PROMPT 6



SELECT COUNT(*)
FROM users
;

PROMPT 7

ALTER TABLE photograph
ADD COLUMN userid varchar (245) AFTER locationid



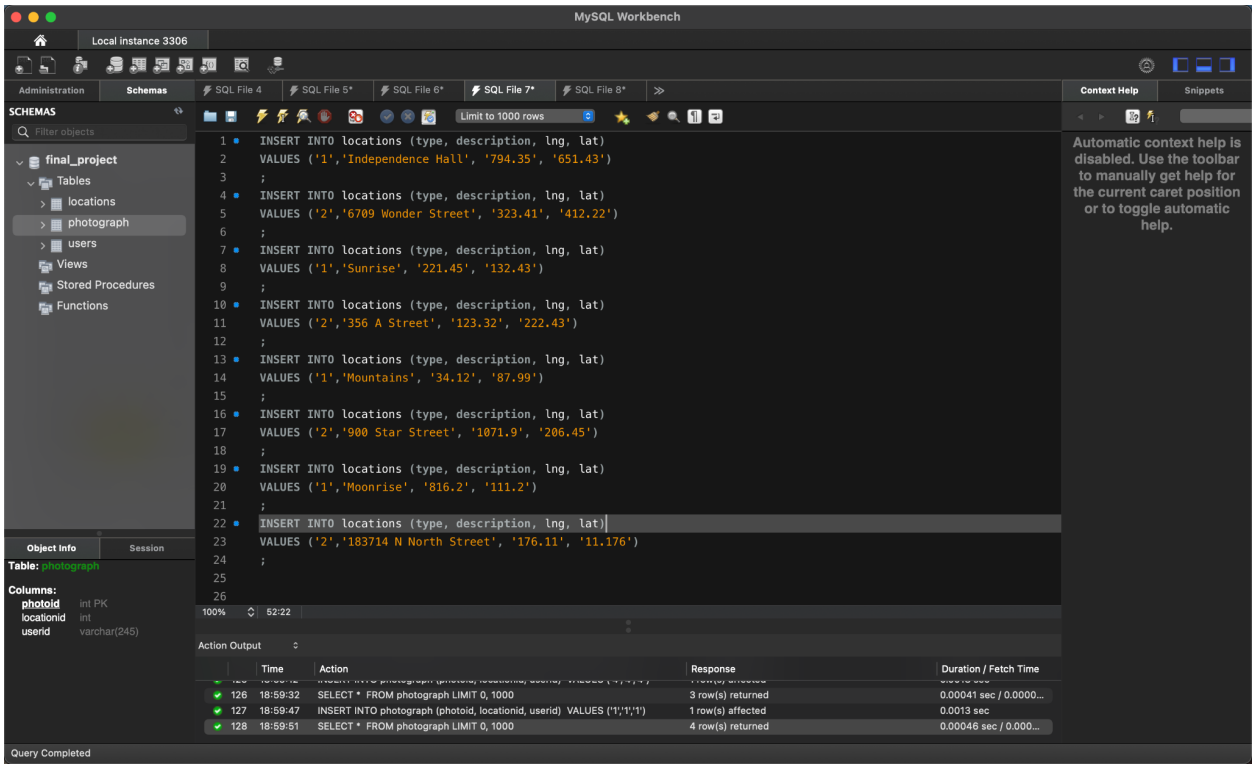
PROMPT 8

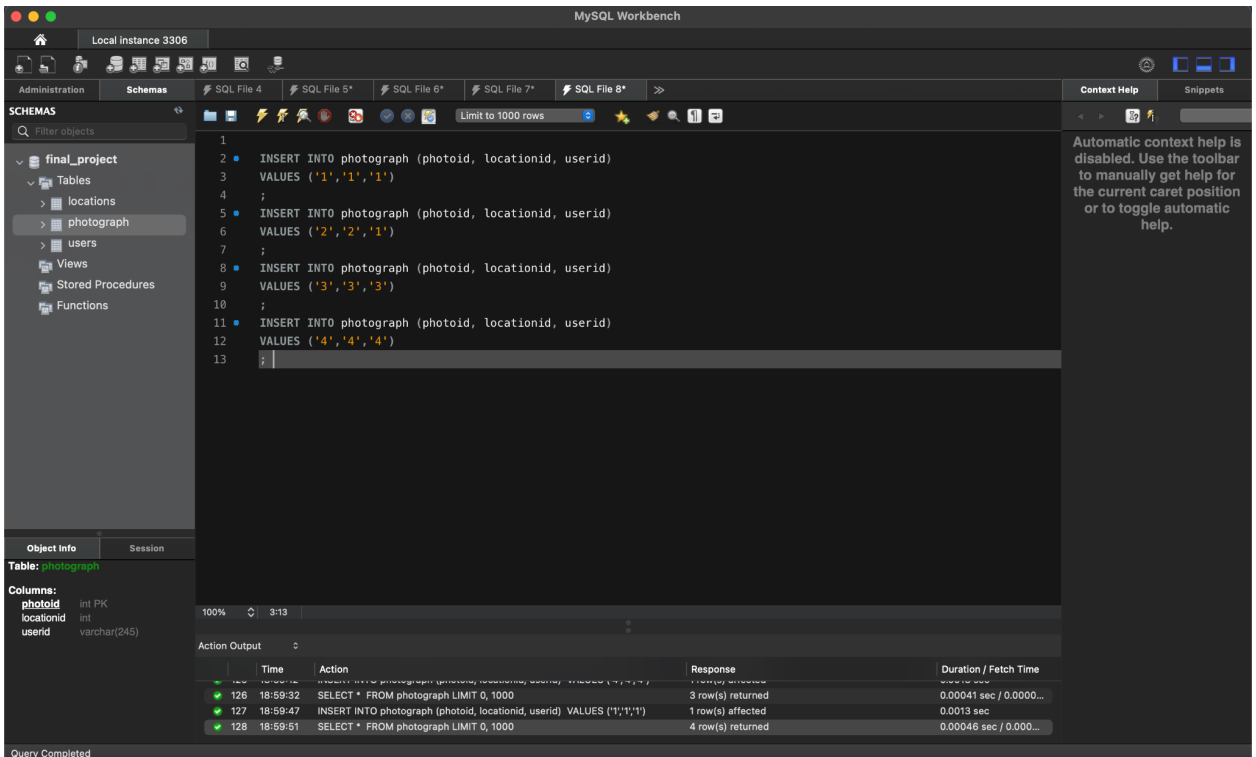
In order to ensure integrity for the userid column it would need to be made into a foreign key. The foreign key would be tied to the primary key userid column in the users table. This would ensure that the data link between the two would not be lost. Foreign and Primary keys are integral to relational databases and show the relationships between tables. Since we have already created the user id column in the photograph table. We would need to use ALTER TABLE, ADD FOREIGN KEY and REFRENCES. This would be the code we would need to use to add the relationship between the users table and the photograph

PROMPT 9

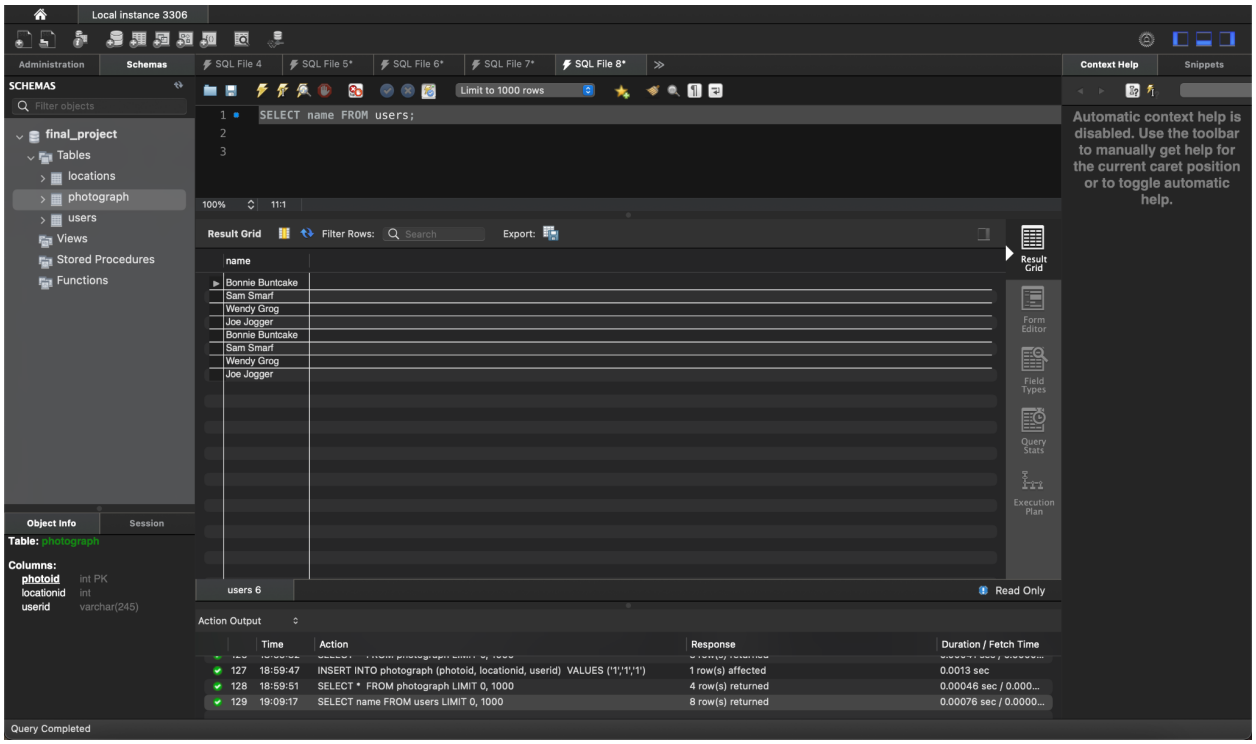
```
INSERT INTO locations (type, description, lng, lat)
VALUES ('1','Independence Hall', '794.35', '651.43')
;
INSERT INTO locations (type, description, lng, lat)
VALUES ('2','6709 Wonder Street', '323.41', '412.22')
;
INSERT INTO locations (type, description, lng, lat)
VALUES ('1','Sunrise', '221.45', '132.43')
;
INSERT INTO locations (type, description, lng, lat)
VALUES ('2','356 A Street', '123.32', '222.43')
;
INSERT INTO locations (type, description, lng, lat)
VALUES ('1','Mountains', '34.12', '87.99')
;
INSERT INTO locations (type, description, lng, lat)
VALUES ('2','900 Star Street', '1071.9', '206.45')
;
INSERT INTO locations (type, description, lng, lat)
VALUES ('1','Moonrise', '816.2', '111.2')
;
INSERT INTO locations (type, description, lng, lat)
VALUES ('2','183714 N North Street', '176.11', '11.176')
;
INSERT INTO photograph (photoid, locationid, userid)
VALUES ('1','1','1')
;
INSERT INTO photograph (photoid, locationid, userid)
VALUES ('2','2','1')
;
```

```
INSERT INTO photograph (photoid, locationid, userid)
VALUES ('3','3','3')
;
INSERT INTO photograph (photoid, locationid, userid)
VALUES ('4','4','4')
;
```





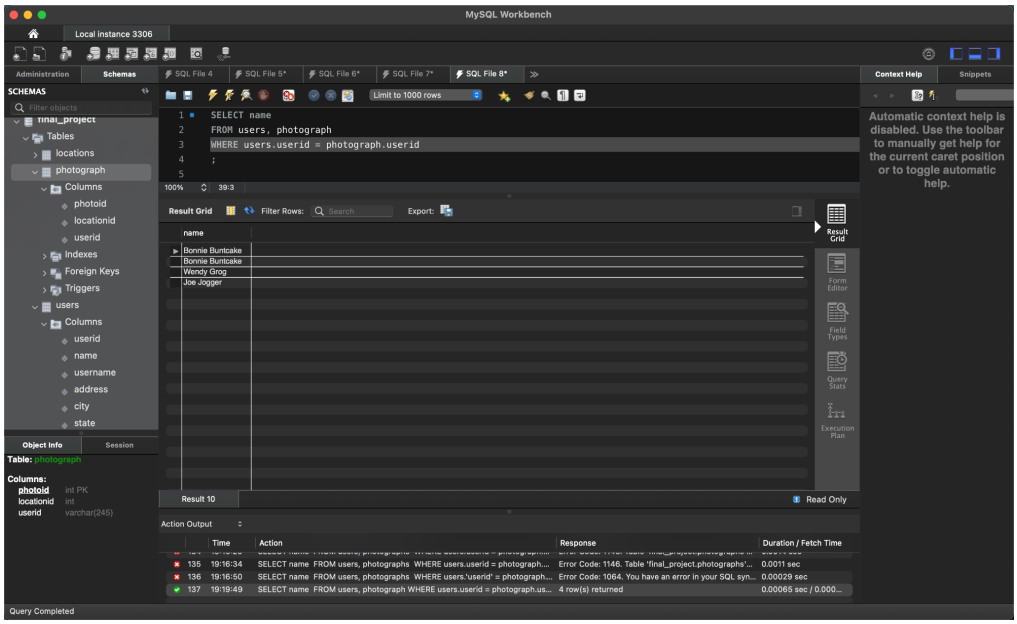
PROMPT 10



SELECT name
FROM users, photograph
WHERE users.userid = photograph.userid ;

PROMPT 11

```
SELECT name
FROM users, photograph
WHERE users.userid = photograph.userid ;
```



PROMPT 12

```
SELECT DISTINCT name
FROM users, photograph
WHERE users.userid = photograph.userid
;
```