

10. Do you Python Lab

**Used under the open commons from JMU CS101 Labs

```
import sqlite3
conn = sqlite3.connect('orders.db')
conn = sqlite3.connect(r'/Users/nhinguyen/Desktop/School/Spring 2022/DS
3002/Lab/orders.db')
cur = conn.cursor()

cur.execute("""CREATE TABLE IF NOT EXISTS users(
...     userid INT PRIMARY KEY,
...     fname TEXT,
...     lname TEXT,
...     gender TEXT);
... """)
<sqlite3.Cursor object at 0x106643940>
conn.commit()

cur.execute("""CREATE TABLE IF NOT EXISTS orders(
...     orderid INT PRIMARY KEY,
...     date TEXT,
...     userid TEXT,
...     total TEXT);
... """)
<sqlite3.Cursor object at 0x106643940>
conn.commit()

cur.execute("""INSERT INTO users(userid, fname, lname, gender)
...     VALUES('00001', 'Nik', 'Piepenbreier', 'male');""")
<sqlite3.Cursor object at 0x106643940>
conn.commit()

user = ('00002','Lois','Lane','Female')

cur.execute("INSERT INTO users VALUES(?, ?, ?, ?);", user)
<sqlite3.Cursor object at 0x106643940>
conn.commit()

more_users = [('00003', 'Peter', 'Parker', 'Male'), ('00004', 'Bruce', 'Wayne',
'male')]
cur.executemany("INSERT INTO users VALUES(?, ?, ?, ?);", more_users)
<sqlite3.Cursor object at 0x106643940>
conn.commit()
```

```
customers = [('00005', 'Stephanie', 'Stewart', 'female'), ('00006', 'Sincere',  
'Sherman', 'female'), ('00007', 'Sidney', 'Horn', 'male'), ('00008', 'Litzzy',  
'Yates', 'female'), ('00009', 'Jaxon', 'Mills', 'male'), ('00010', 'Paul',  
'Richard', 'male'), ('00011', 'Kamari', 'Holden', 'female'), ('00012', 'Gaige',  
'Summers', 'female'), ('00013', 'Andrea', 'Snow', 'female'), ('00014',  
'Angelica', 'Barnes', 'female'), ('00015', 'Leah', 'Pitts', 'female'),  
(('00016', 'Dillan', 'Olsen', 'male'), ('00017', 'Joe', 'Walsh', 'male'),  
(('00018', 'Reagan', 'Cooper', 'male'), ('00019', 'Aubree', 'Hogan', 'female'),  
(('00020', 'Avery', 'Floyd', 'male'), ('00021', 'Elianna', 'Simmons', 'female'),  
(('00022', 'Rodney', 'Stout', 'male'), ('00023', 'Elaine', 'Mcintosh',  
'female'), ('00024', 'Myla', 'Mckenzie', 'female'), ('00025', 'Alijah', 'Horn',  
'female'), ('00026', 'Rohan', 'Peterson', 'male'), ('00027', 'Irene',  
'Walters', 'female'), ('00028', 'Lilia', 'Sellers', 'female'), ('00029',  
'Perla', 'Jefferson', 'female'), ('00030', 'Ashley', 'Klein', 'female')]
```

```
orders = [('00001', '2020-01-01', '00025', '178'), ('00002', '2020-01-03',  
'00025', '39'), ('00003', '2020-01-07', '00016', '153'), ('00004',  
'2020-01-10', '00015', '110'), ('00005', '2020-01-11', '00024', '219'),  
(('00006', '2020-01-12', '00029', '37'), ('00007', '2020-01-14', '00028',  
'227'), ('00008', '2020-01-18', '00010', '232'), ('00009', '2020-01-22',  
'00016', '236'), ('00010', '2020-01-26', '00017', '116'), ('00011',  
'2020-01-28', '00028', '221'), ('00012', '2020-01-31', '00021', '238'),  
(('00013', '2020-02-02', '00015', '177'), ('00014', '2020-02-05', '00025',  
'76'), ('00015', '2020-02-08', '00022', '245'), ('00016', '2020-02-12',  
'00008', '180'), ('00017', '2020-02-14', '00020', '190'), ('00018',  
'2020-02-18', '00030', '166'), ('00019', '2020-02-22', '00002', '168'),  
(('00020', '2020-02-26', '00021', '174'), ('00021', '2020-02-29', '00017',  
'126'), ('00022', '2020-03-02', '00019', '211'), ('00023', '2020-03-05',  
'00030', '144'), ('00024', '2020-03-09', '00012', '112'), ('00025',  
'2020-03-10', '00006', '45'), ('00026', '2020-03-11', '00004', '200'),  
(('00027', '2020-03-14', '00015', '226'), ('00028', '2020-03-17', '00030',  
'189'), ('00029', '2020-03-20', '00004', '152'), ('00030', '2020-03-22',  
'00026', '239'), ('00031', '2020-03-23', '00012', '135'), ('00032',  
'2020-03-24', '00013', '211'), ('00033', '2020-03-27', '00030', '226'),  
(('00034', '2020-03-28', '00007', '173'), ('00035', '2020-03-30', '00010',  
'144'), ('00036', '2020-04-01', '00017', '185'), ('00037', '2020-04-03',  
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(('00041', '2020-04-15', '00024', '132'), ('00042', '2020-04-18', '00008',  
'238'), ('00043', '2020-04-21', '00003', '50'), ('00044', '2020-04-25',  
'00019', '98'), ('00045', '2020-04-26', '00017', '167'), ('00046',  
'2020-04-28', '00009', '215'), ('00047', '2020-05-01', '00014', '142'),  
(('00048', '2020-05-05', '00022', '173'), ('00049', '2020-05-06', '00015',  
'80'), ('00050', '2020-05-07', '00017', '37'), ('00051', '2020-05-08', '00002',  
'36'), ('00052', '2020-05-10', '00022', '65'), ('00053', '2020-05-14', '00019',  
'110'), ('00054', '2020-05-18', '00017', '36'), ('00055', '2020-05-21',  
'00008', '163'), ('00056', '2020-05-24', '00024', '91'), ('00057',  
'2020-05-26', '00028', '154'), ('00058', '2020-05-30', '00022', '130'),  
(('00059', '2020-05-31', '00017', '119'), ('00060', '2020-06-01', '00024',
```

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'137'), ('00061', '2020-06-03', '00017', '206'), ('00062', '2020-06-04',
'00013', '100'), ('00063', '2020-06-05', '00021', '187'), ('00064',
'2020-06-09', '00025', '170'), ('00065', '2020-06-11', '00011', '149'),
('00066', '2020-06-12', '00007', '195'), ('00067', '2020-06-14', '00015',
'30'), ('00068', '2020-06-16', '00002', '246'), ('00069', '2020-06-20',
'00028', '163'), ('00070', '2020-06-22', '00005', '184'), ('00071',
'2020-06-23', '00022', '68'), ('00072', '2020-06-27', '00013', '92'), ('00073',
'2020-06-30', '00022', '149'), ('00074', '2020-07-04', '00002', '65'),
('00075', '2020-07-05', '00017', '88'), ('00076', '2020-07-09', '00007',
'156'), ('00077', '2020-07-13', '00010', '26'), ('00078', '2020-07-16',
'00008', '55'), ('00079', '2020-07-20', '00019', '81'), ('00080', '2020-07-22',
'00011', '78'), ('00081', '2020-07-23', '00026', '166'), ('00082',
'2020-07-27', '00014', '65'), ('00083', '2020-07-30', '00021', '205'),
('00084', '2020-08-01', '00026', '140'), ('00085', '2020-08-05', '00006',
'236'), ('00086', '2020-08-06', '00021', '208'), ('00087', '2020-08-07',
'00021', '169'), ('00088', '2020-08-08', '00004', '157'), ('00089',
'2020-08-11', '00017', '71'), ('00090', '2020-08-13', '00025', '89'), ('00091',
'2020-08-16', '00014', '249'), ('00092', '2020-08-18', '00012', '59'),
('00093', '2020-08-19', '00013', '121'), ('00094', '2020-08-20', '00025',
'179'), ('00095', '2020-08-22', '00017', '208'), ('00096', '2020-08-26',
'00024', '217'), ('00097', '2020-08-28', '00004', '206'), ('00098',
'2020-08-30', '00017', '114'), ('00099', '2020-08-31', '00017', '169'),
('00100', '2020-09-02', '00022', '226')]
```

```
cur.executemany("INSERT INTO users VALUES(?, ?, ?, ?);", customers)
<sqlite3.Cursor object at 0x106643940>
cur.executemany("INSERT INTO orders VALUES(?, ?, ?, ?);", orders)
<sqlite3.Cursor object at 0x106643940>
conn.commit()
```

```
cur.execute("SELECT * FROM users;")
one_result = cur.fetchone()
print(one_result)
```

```
out:
(1, 'Nik', 'Piepenbreier', 'male')
```

```
cur.execute("SELECT * FROM users;")
<sqlite3.Cursor object at 0x106643940>
three_results = cur.fetchmany(3)
print(three_results)
```

```
out:
[(1, 'Nik', 'Piepenbreier', 'male'), (2, 'Lois', 'Lane', 'Female'), (3,
'Peter', 'Parker', 'Male')]
```

```
cur.execute("SELECT * FROM users;")
<sqlite3.Cursor object at 0x106643940>
all_results = cur.fetchall()
print(all_results)
```

out:

```
[(1, 'Nik', 'Piepenbreier', 'male'), (2, 'Lois', 'Lane', 'Female'), (3,
'Peter', 'Parker', 'Male'), (4, 'Bruce', 'Wayne', 'male'), (5, 'Stephanie',
'Stewart', 'female'), (6, 'Sincere', 'Sherman', 'female'), (7, 'Sidney',
'Horn', 'male'), (8, 'Litzzy', 'Yates', 'female'), (9, 'Jaxon', 'Mills',
'male'), (10, 'Paul', 'Richard', 'male'), (11, 'Kamari', 'Holden', 'female'),
(12, 'Gaige', 'Summers', 'female'), (13, 'Andrea', 'Snow', 'female'), (14,
'Angelica', 'Barnes', 'female'), (15, 'Leah', 'Pitts', 'female'), (16,
'Dillan', 'Olsen', 'male'), (17, 'Joe', 'Walsh', 'male'), (18, 'Reagan',
'Cooper', 'male'), (19, 'Aubree', 'Hogan', 'female'), (20, 'Avery', 'Floyd',
'male'), (21, 'Elianna', 'Simmons', 'female'), (22, 'Rodney', 'Stout', 'male'),
(23, 'Elaine', 'Mcintosh', 'female'), (24, 'Myla', 'Mckenzie', 'female'), (25,
'Alijah', 'Horn', 'female'), (26, 'Rohan', 'Peterson', 'male'), (27, 'Irene',
'Walters', 'female'), (28, 'Lilia', 'Sellers', 'female'), (29, 'Perla',
'Jefferson', 'female'), (30, 'Ashley', 'Klein', 'female')]
```

```
cur.execute("DELETE FROM users WHERE lname='Parker';")
<sqlite3.Cursor object at 0x106643940>
conn.commit()
cur.execute("select * from users where lname='Parker';")
<sqlite3.Cursor object at 0x106643940>
print(cur.fetchall())
```

out:

```
[]
```

```

cur.execute("""SELECT *, users.fname, users.lname FROM orders
...     LEFT JOIN users ON users.userid=orders.userid;""")
<sqlite3.Cursor object at 0x106643940>
print(cur.fetchall())

```

out:

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[(1, '2020-01-01', '00025', '178', 25, 'Alijah', 'Horn', 'female', 'Alijah',
'Horn'), (2, '2020-01-03', '00025', '39', 25, 'Alijah', 'Horn', 'female',
'Alijah', 'Horn'), (3, '2020-01-07', '00016', '153', 16, 'Dillan', 'Olsen',
'male', 'Dillan', 'Olsen'), (4, '2020-01-10', '00015', '110', 15, 'Leah',
'Pitts', 'female', 'Leah', 'Pitts'), (5, '2020-01-11', '00024', '219', 24,
'Myla', 'Mckenzie', 'female', 'Myla', 'Mckenzie'), (6, '2020-01-12', '00029',
'37', 29, 'Perla', 'Jefferson', 'female', 'Perla', 'Jefferson'), (7,
'2020-01-14', '00028', '227', 28, 'Lilia', 'Sellers', 'female', 'Lilia',
'Sellers'), (8, '2020-01-18', '00010', '232', 10, 'Paul', 'Richard', 'male',
'Paul', 'Richard'), (9, '2020-01-22', '00016', '236', 16, 'Dillan', 'Olsen',
'male', 'Dillan', 'Olsen'), (10, '2020-01-26', '00017', '116', 17, 'Joe',
'Walsh', 'male', 'Joe', 'Walsh'), (11, '2020-01-28', '00028', '221', 28,
'Lilia', 'Sellers', 'female', 'Lilia', 'Sellers'), (12, '2020-01-31', '00021',
'238', 21, 'Elianna', 'Simmons', 'female', 'Elianna', 'Simmons'), (13,
'2020-02-02', '00015', '177', 15, 'Leah', 'Pitts', 'female', 'Leah', 'Pitts'),
(14, '2020-02-05', '00025', '76', 25, 'Alijah', 'Horn', 'female', 'Alijah',
'Horn'), (15, '2020-02-08', '00022', '245', 22, 'Rodney', 'Stout', 'male',
'Rodney', 'Stout'), (16, '2020-02-12', '00008', '180', 8, 'Litzzy', 'Yates',
'female', 'Litzzy', 'Yates'), (17, '2020-02-14', '00020', '190', 20, 'Avery',
'Floyd', 'male', 'Avery', 'Floyd'), (18, '2020-02-18', '00030', '166', 30,
'Ashley', 'Klein', 'female', 'Ashley', 'Klein'), (19, '2020-02-22', '00002',
'168', 2, 'Lois', 'Lane', 'Female', 'Lois', 'Lane'), (20, '2020-02-26',
'00021', '174', 21, 'Elianna', 'Simmons', 'female', 'Elianna', 'Simmons'), (21,
'2020-02-29', '00017', '126', 17, 'Joe', 'Walsh', 'male', 'Joe', 'Walsh'), (22,
'2020-03-02', '00019', '211', 19, 'Aubree', 'Hogan', 'female', 'Aubree',
'Hogan'), (23, '2020-03-05', '00030', '144', 30, 'Ashley', 'Klein', 'female',
'Ashley', 'Klein'), (24, '2020-03-09', '00012', '112', 12, 'Gauge', 'Summers',
'female', 'Gauge', 'Summers'), (25, '2020-03-10', '00006', '45', 6, 'Sincere',
'Sherman', 'female', 'Sincere', 'Sherman'), (26, '2020-03-11', '00004', '200',
4, 'Bruce', 'Wayne', 'male', 'Bruce', 'Wayne'), (27, '2020-03-14', '00015',
'226', 15, 'Leah', 'Pitts', 'female', 'Leah', 'Pitts'), (28, '2020-03-17',
'00030', '189', 30, 'Ashley', 'Klein', 'female', 'Ashley', 'Klein'), (29,
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(30, '2020-03-22', '00026', '239', 26, 'Rohan', 'Peterson', 'male', 'Rohan',
'Peterson'), (31, '2020-03-23', '00012', '135', 12, 'Gauge', 'Summers',
'female', 'Gauge', 'Summers'), (32, '2020-03-24', '00013', '211', 13, 'Andrea',
'Snow', 'female', 'Andrea', 'Snow'), (33, '2020-03-27', '00030', '226', 30,
'Ashley', 'Klein', 'female', 'Ashley', 'Klein'), (34, '2020-03-28', '00007',
'173', 7, 'Sidney', 'Horn', 'male', 'Sidney', 'Horn'), (35, '2020-03-30',
'00010', '144', 10, 'Paul', 'Richard', 'male', 'Paul', 'Richard'), (36,
'2020-04-01', '00017', '185', 17, 'Joe', 'Walsh', 'male', 'Joe', 'Walsh'), (37,
'2020-04-03', '00009', '95', 9, 'Jaxon', 'Mills', 'male', 'Jaxon', 'Mills'),
(38, '2020-04-06', '00009', '138', 9, 'Jaxon', 'Mills', 'male', 'Jaxon',

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'Mills'), (39, '2020-04-10', '00025', '223', 25, 'Alijah', 'Horn', 'female', 'Alijah', 'Horn'), (40, '2020-04-12', '00019', '118', 19, 'Aubree', 'Hogan', 'female', 'Aubree', 'Hogan'), (41, '2020-04-15', '00024', '132', 24, 'Myla', 'Mckenzie', 'female', 'Myla', 'Mckenzie'), (42, '2020-04-18', '00008', '238', 8, 'Litzzy', 'Yates', 'female', 'Litzzy', 'Yates'), (43, '2020-04-21', '00003', '50', None, None, None, None, None, None), (44, '2020-04-25', '00019', '98', 19, 'Aubree', 'Hogan', 'female', 'Aubree', 'Hogan'), (45, '2020-04-26', '00017', '167', 17, 'Joe', 'Walsh', 'male', 'Joe', 'Walsh'), (46, '2020-04-28', '00009', '215', 9, 'Jaxon', 'Mills', 'male', 'Jaxon', 'Mills'), (47, '2020-05-01', '00014', '142', 14, 'Angelica', 'Barnes', 'female', 'Angelica', 'Barnes'), (48, '2020-05-05', '00022', '173', 22, 'Rodney', 'Stout', 'male', 'Rodney', 'Stout'), (49, '2020-05-06', '00015', '80', 15, 'Leah', 'Pitts', 'female', 'Leah', 'Pitts'), (50, '2020-05-07', '00017', '37', 17, 'Joe', 'Walsh', 'male', 'Joe', 'Walsh'), (51, '2020-05-08', '00002', '36', 2, 'Lois', 'Lane', 'Female', 'Lois', 'Lane'), (52, '2020-05-10', '00022', '65', 22, 'Rodney', 'Stout', 'male', 'Rodney', 'Stout'), (53, '2020-05-14', '00019', '110', 19, 'Aubree', 'Hogan', 'female', 'Aubree', 'Hogan'), (54, '2020-05-18', '00017', '36', 17, 'Joe', 'Walsh', 'male', 'Joe', 'Walsh'), (55, '2020-05-21', '00008', '163', 8, 'Litzzy', 'Yates', 'female', 'Litzzy', 'Yates'), (56, '2020-05-24', '00024', '91', 24, 'Myla', 'Mckenzie', 'female', 'Myla', 'Mckenzie'), (57, '2020-05-26', '00028', '154', 28, 'Lilia', 'Sellers', 'female', 'Lilia', 'Sellers'), (58, '2020-05-30', '00022', '130', 22, 'Rodney', 'Stout', 'male', 'Rodney', 'Stout'), (59, '2020-05-31', '00017', '119', 17, 'Joe', 'Walsh', 'male', 'Joe', 'Walsh'), (60, '2020-06-01', '00024', '137', 24, 'Myla', 'Mckenzie', 'female', 'Myla', 'Mckenzie'), (61, '2020-06-03', '00017', '206', 17, 'Joe', 'Walsh', 'male', 'Joe', 'Walsh'), (62, '2020-06-04', '00013', '100', 13, 'Andrea', 'Snow', 'female', 'Andrea', 'Snow'), (63, '2020-06-05', '00021', '187', 21, 'Elianna', 'Simmons', 'female', 'Elianna', 'Simmons'), (64, '2020-06-09', '00025', '170', 25, 'Alijah', 'Horn', 'female', 'Alijah', 'Horn'), (65, '2020-06-11', '00011', '149', 11, 'Kamari', 'Holden', 'female', 'Kamari', 'Holden'), (66, '2020-06-12', '00007', '195', 7, 'Sidney', 'Horn', 'male', 'Sidney', 'Horn'), (67, '2020-06-14', '00015', '30', 15, 'Leah', 'Pitts', 'female', 'Leah', 'Pitts'), (68, '2020-06-16', '00002', '246', 2, 'Lois', 'Lane', 'Female', 'Lois', 'Lane'), (69, '2020-06-20', '00028', '163', 28, 'Lilia', 'Sellers', 'female', 'Lilia', 'Sellers'), (70, '2020-06-22', '00005', '184', 5, 'Stephanie', 'Stewart', 'female', 'Stephanie', 'Stewart'), (71, '2020-06-23', '00022', '68', 22, 'Rodney', 'Stout', 'male', 'Rodney', 'Stout'), (72, '2020-06-27', '00013', '92', 13, 'Andrea', 'Snow', 'female', 'Andrea', 'Snow'), (73, '2020-06-30', '00022', '149', 22, 'Rodney', 'Stout', 'male', 'Rodney', 'Stout'), (74, '2020-07-04', '00002', '65', 2, 'Lois', 'Lane', 'Female', 'Lois', 'Lane'), (75, '2020-07-05', '00017', '88', 17, 'Joe', 'Walsh', 'male', 'Joe', 'Walsh'), (76, '2020-07-09', '00007', '156', 7, 'Sidney', 'Horn', 'male', 'Sidney', 'Horn'), (77, '2020-07-13', '00010', '26', 10, 'Paul', 'Richard', 'male', 'Paul', 'Richard'), (78, '2020-07-16', '00008', '55', 8, 'Litzzy', 'Yates', 'female', 'Litzzy', 'Yates'), (79, '2020-07-20', '00019', '81', 19, 'Aubree', 'Hogan', 'female', 'Aubree', 'Hogan'), (80, '2020-07-22', '00011', '78', 11, 'Kamari', 'Holden', 'female', 'Kamari', 'Holden'), (81, '2020-07-23', '00026', '166', 26, 'Rohan', 'Peterson', 'male', 'Rohan', 'Peterson'), (82, '2020-07-27', '00014', '65', 14, 'Angelica',

'Barnes', 'female', 'Angelica', 'Barnes'), (83, '2020-07-30', '00021', '205',
21, 'Elianna', 'Simmons', 'female', 'Elianna', 'Simmons'), (84, '2020-08-01',
'00026', '140', 26, 'Rohan', 'Peterson', 'male', 'Rohan', 'Peterson'), (85,
'2020-08-05', '00006', '236', 6, 'Sincere', 'Sherman', 'female', 'Sincere',
'Sherman'), (86, '2020-08-06', '00021', '208', 21, 'Elianna', 'Simmons',
'female', 'Elianna', 'Simmons'), (87, '2020-08-07', '00021', '169', 21,
'Elianna', 'Simmons', 'female', 'Elianna', 'Simmons'), (88, '2020-08-08',
'00004', '157', 4, 'Bruce', 'Wayne', 'male', 'Bruce', 'Wayne'), (89,
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'2020-08-13', '00025', '89', 25, 'Alijah', 'Horn', 'female', 'Alijah', 'Horn'),
(91, '2020-08-16', '00014', '249', 14, 'Angelica', 'Barnes', 'female',
'Angelica', 'Barnes'), (92, '2020-08-18', '00012', '59', 12, 'Gaige',
'Summers', 'female', 'Gaige', 'Summers'), (93, '2020-08-19', '00013', '121',
13, 'Andrea', 'Snow', 'female', 'Andrea', 'Snow'), (94, '2020-08-20', '00025',
'179', 25, 'Alijah', 'Horn', 'female', 'Alijah', 'Horn'), (95, '2020-08-22',
'00017', '208', 17, 'Joe', 'Walsh', 'male', 'Joe', 'Walsh'), (96, '2020-08-26',
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'2020-08-28', '00004', '206', 4, 'Bruce', 'Wayne', 'male', 'Bruce', 'Wayne'),
(98, '2020-08-30', '00017', '114', 17, 'Joe', 'Walsh', 'male', 'Joe', 'Walsh'),
(99, '2020-08-31', '00017', '169', 17, 'Joe', 'Walsh', 'male', 'Joe', 'Walsh'),
(100, '2020-09-02', '00022', '226', 22, 'Rodney', 'Stout', 'male', 'Rodney',
'Stout')]