

# Problem 1

```
import sqlite3
```

```
con = sqlite3.connect('twitter_clone.db')
```

```
cur = con.cursor()
```

```
sql = """
```

```
SELECT count(*) FROM users WHERE password LIKE '%a%';
```

```
"""
```

```
cur.execute(sql)
```

```
for row in cur.fetchall():
```

```
    print('row[0]=', row[0])
```

# Problem 2

```
import sqlite3
```

```
con = sqlite3.connect('twitter_clone.db')
```

```
cur = con.cursor()
```

```
sql = """
```

```
INSERT INTO users (password, username) VALUES ('example', 'password');
```

```
"""
```

```
cur.execute(sql)
```

```
con.commit()
```

```
sql = """
```

```
SELECT password,username FROM users WHERE username='password';
```

```
"""
```

```
cur.execute(sql)
```

```
for row in cur.fetchall():
```

```
    print('row[0]=', row[0])
```

```
    print('row[1]=', row[1])
```

# Problem 3

```
import sqlite3
```

```
con = sqlite3.connect('twitter_clone.db')
```

```
cur = con.cursor()
```

```
username = "example", 'password'), ('example2"
```

```
password = 'password'
```

```
sql = ""
```

```
INSERT INTO users (username, password) VALUES (''+username+'',  
''+password+'');
```

```
""
```

```
cur.execute(sql)
```

```
con.commit()
```

```
sql = ""
```

```
SELECT id,password FROM users WHERE username LIKE 'example%';
```

```
""
```

```
cur.execute(sql)
```

```
for row in cur.fetchall():
```

```
    print('row[0]=', row[0])
```

```
    print('row[1]=', row[1])
```

# Problem 4

```
import sqlite3
```

```
con = sqlite3.connect('twitter_clone.db')
cur = con.cursor()
```

```
username = "example", 'password'), ('example2"
password = 'password'
sql = """
INSERT INTO users (username, password) VALUES (?, ?);
"""
```

```
cur.execute(sql, [username, password])
con.commit()
```

```
sql = """
SELECT id,password FROM users WHERE username='example';
"""
```

```
cur.execute(sql)
for row in cur.fetchall():
    print('row[0]=', row[0])
    print('row[1]=', row[1])
```

# Problem 5

```
import sqlite3

con = sqlite3.connect('twitter_clone.db')
cur = con.cursor()

username = "Mike' OR username='TRUMP"
sql = """
SELECT id,password FROM users WHERE username=''''+ username +''''';
"""
cur.execute(sql)
user_ids = []
for row in cur.fetchall():
    user_ids.append(row[0])

for user_id in user_ids:
    sql = """
    SELECT count(*) FROM messages WHERE sender_id=?;
    """
    cur.execute(sql, [user_id])
    for row in cur.fetchall():
        print('row[0]=', row[0])
```