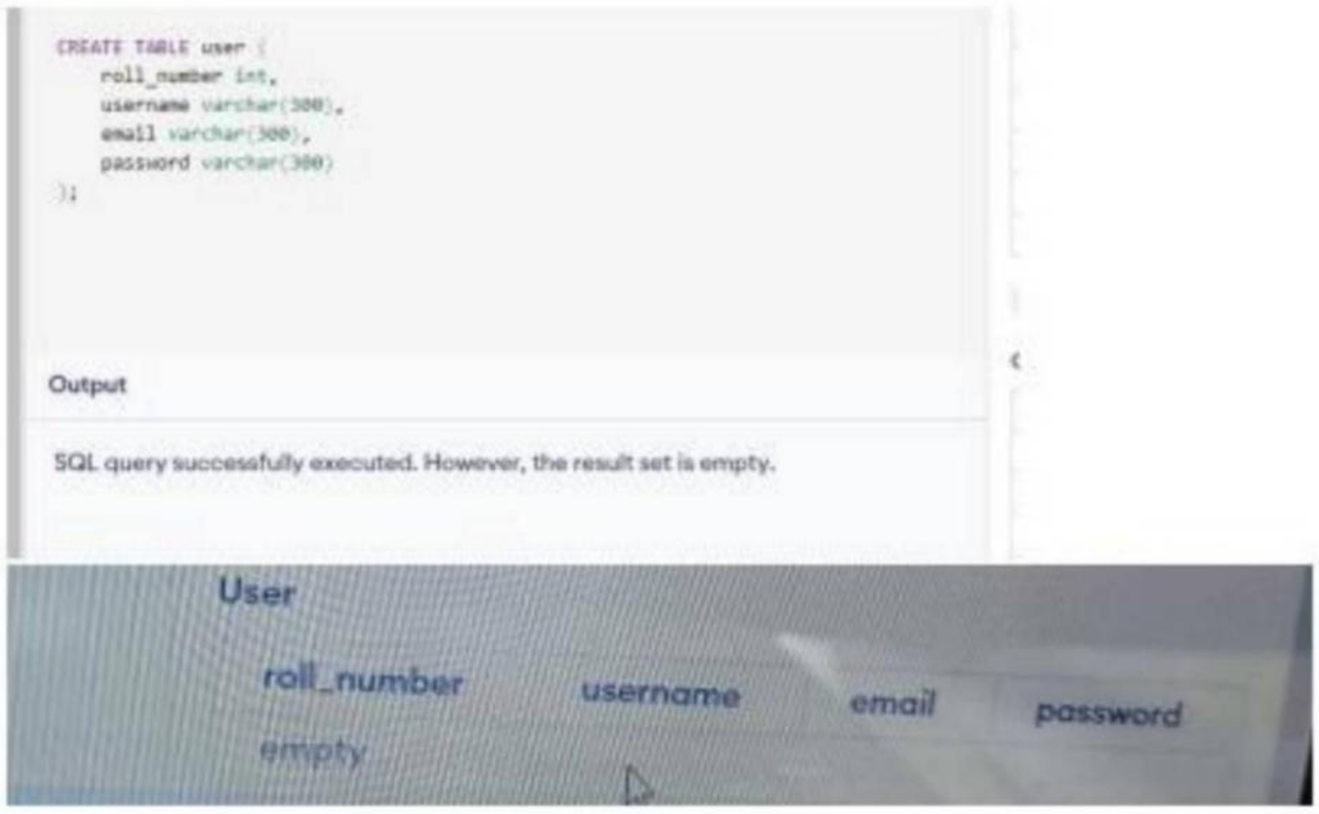
1. **Create user table with user with email, username, roll number, password**

```
CREATE TABLE user (
roll_number int, username varchar(300),
 email varchar(300),
password varchar(300)
);
```

OUTPUT:



2. **Perform UPDATE, DELETE Queries with user table**

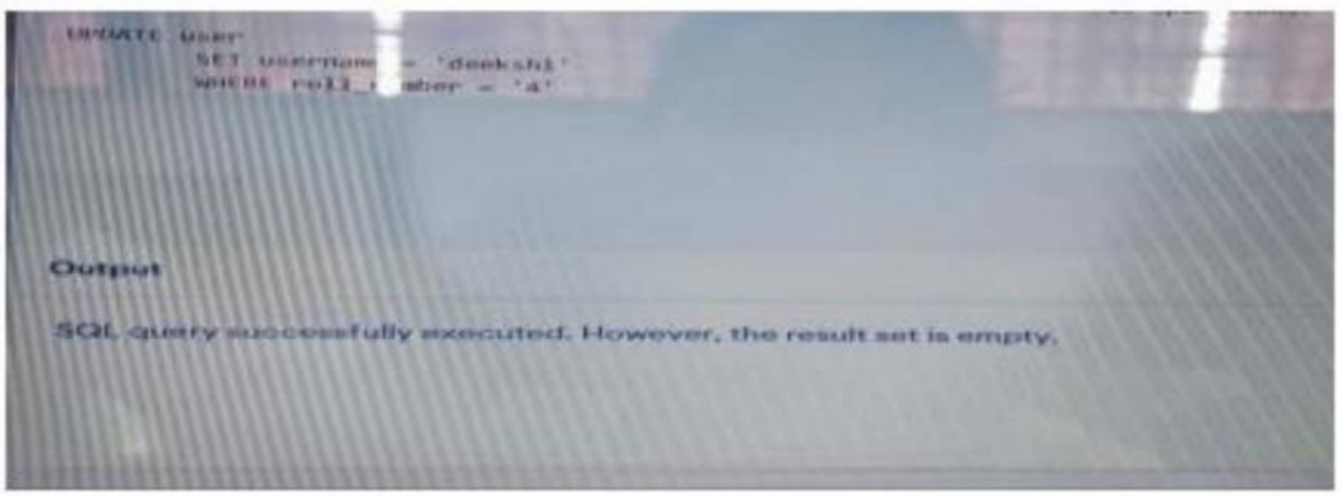
INSERT Statement:

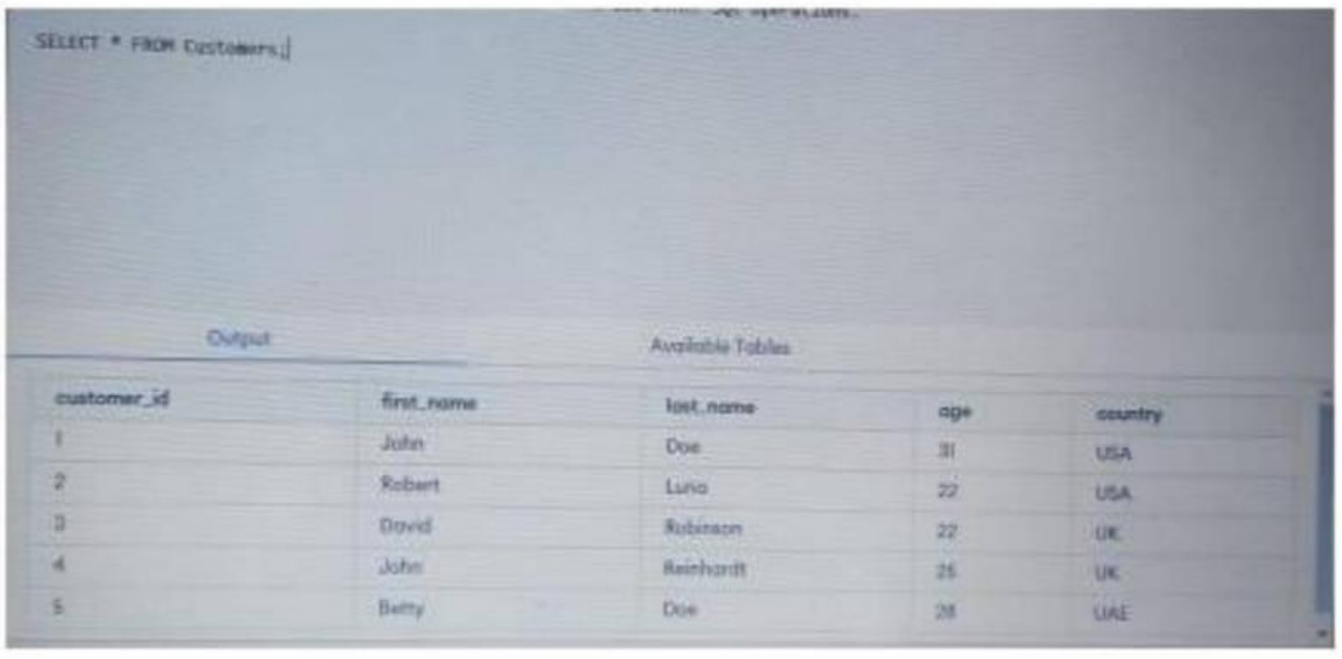
```
INSERT INTO user
 (roll_number, username, email, password) VALUES
 (1, 'akshya', 'akshya@gmail.com','akshya123'),
 (2, 'ashwini', 'ashwini@gmail.com','ashwini123'),
 (3, 'durga', 'durga@gmail.com','durga123'),
(4, 'deekshitha', 'deekshi@gmail.com','deekshi123');
```

OUTPUT:

UPDATE Statement:
UPDATE user SET
username = 'deekshi'
WHERE roll_number = '4'

OUTPUT:





DELETE Statemnet:

insert into user values(5,'aa','aaa@gmail.com','aasdfg2') ;

delete from users where roll_number='5'

OUTPUT:

```
delete from user where roll_number='5'
```

Output | Available Tables

SQL query successfully executed. However, the result set is empty.

```
delete from user where roll_number='5'
```

Output | Available Tables

roll_number	username	email	password
1	akshya	akshya@gmail.com	akshya123
2	ashwini	ashwini@gmail.com	ashwini123
3	durga	durga@gmail.com	durga123
4	deekshi	deekshi@gmail.com	deekshi123

3. Connect python with db2

```
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=824dfd4d-99de-440d-9991-
629c01b3832d.bs2io90l08kqb1od8lcg.databases.appdomain.cloud;PORT=30119;SECUR
ITY=SSL ;
SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=lvq43963;PWD=BsnsG1l2sBgI RhVN",'
','')
 from flask import Flask, render_template, request, redirect, url_for, session
from flask_mysqldb import MySQL
import MySQLdb.cursors
 import reapp = Flask( name )
app.secret_key = 'your secret key'
app.config['MYSQL_HOST'] = 'localhost'
app.config['MYSQL_USER'] = 'root'
app.config['MYSQL_PASSWORD'] = 'your password'
app.config['MYSQL_DB'] = 'geeklogin'
mysql = MySQL(app)
@app.route('/')
@app.route('/login', methods =['GET', 'POST'])
def login():
msg = ''if request.method == 'POST' and 'username' in request.form and 'password' in
request.form:
```

```
username = request.form['username']
password = request.form['password']
cursor = mysql.connection.cursor(MySQLdb.cursors.DictCursor)
cursor.execute('SELECT * FROM accounts WHERE username = % s AND password = % s',
(username, password, ))
account = cursor.fetchone()
if account:
session['loggedin'] = True
session['id'] = account['id']
session['username'] = account['username']
msg = 'Logged in successfully !'
return render_template('index.html', msg = msg)
else:
msg = 'Incorrect username / password !'
return render_template('login.html', msg = msg)
@app.route('/logout')
def logout():
session.pop('loggedin', None)
session.pop('id', None)
session.pop('username', None)
return redirect(url_for('login'))
@app.route('/register', methods =['GET', 'POST'])
def register():
msg = ''
if request.method == 'POST' and 'username' in request.form and 'password' in request.form
and 'email' in request.form :
username = request.form['username']
password = request.form['password']
email = request.form['email']
cursor = mysql.connection.cursor(MySQLdb.cursors.DictCursor)
cursor.execute('SELECT * FROM accounts WHERE username = % s', (username, ))
account = cursor.fetchone()
if account:
msg = 'Account already exists !'
elif not re.match(r'[^@]+@[^@]+\.[^@]+', email):
msg = 'Invalid email address !'
elif not re.match(r'[A-Za-z0-9]+', username):
msg = 'Username must contain only characters and numbers !'
elif not username or not password or not email:
msg = 'Please fill out the form !'
else:
cursor.execute('INSERT INTO accounts VALUES (NULL, % s, % s, % s)', (username, password,
email, ))
mysql.connection.commit()
msg = 'You have successfully registered !'
elif request.method == 'POST':
msg = 'Please fill out the form !'
return render_template('register.html', msg = msg)
```

OUTPUT: