Assignment -2

Connect with Database Assignment

Assignment Date	10 October 2022
Student Name	P.Thanga tamizh
Student Roll Number	621319104060
Maximum Marks	2 Marks

Question-1:

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

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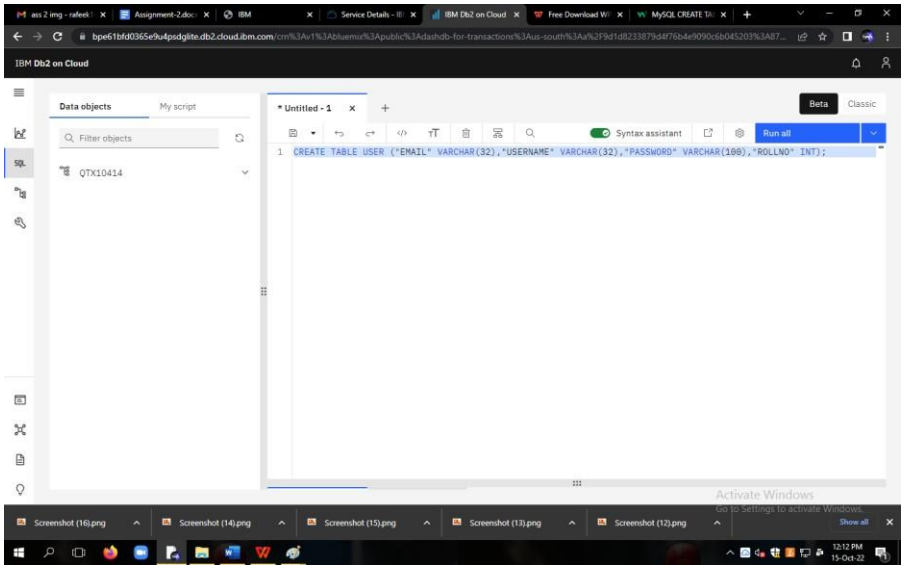
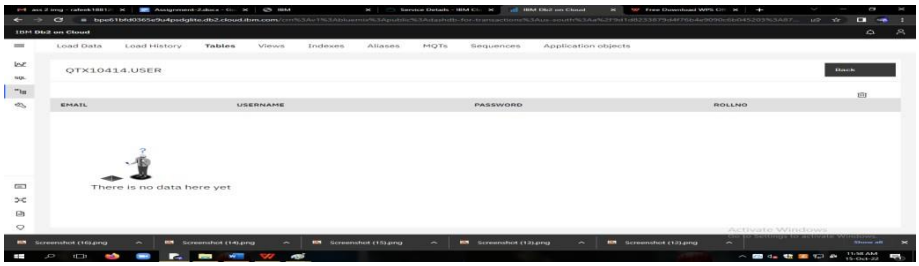




2. Perform UPDATE, DELETE Queries with User table

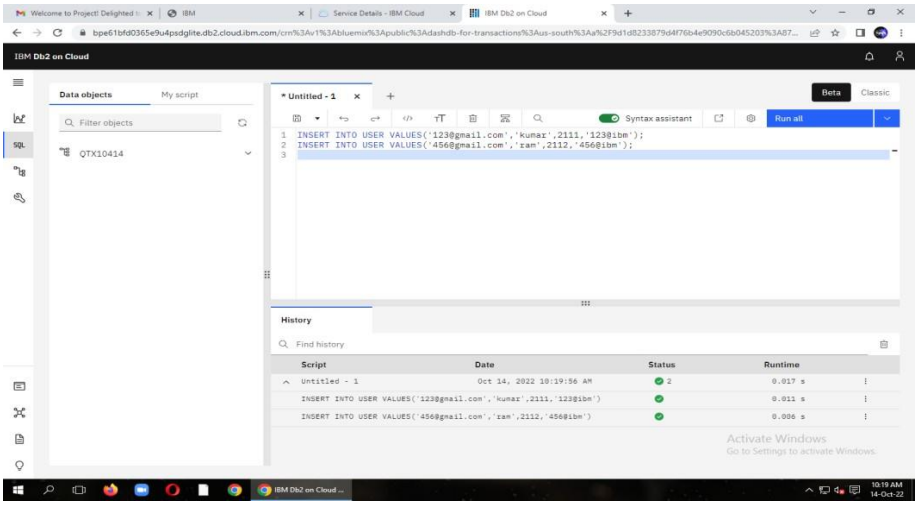
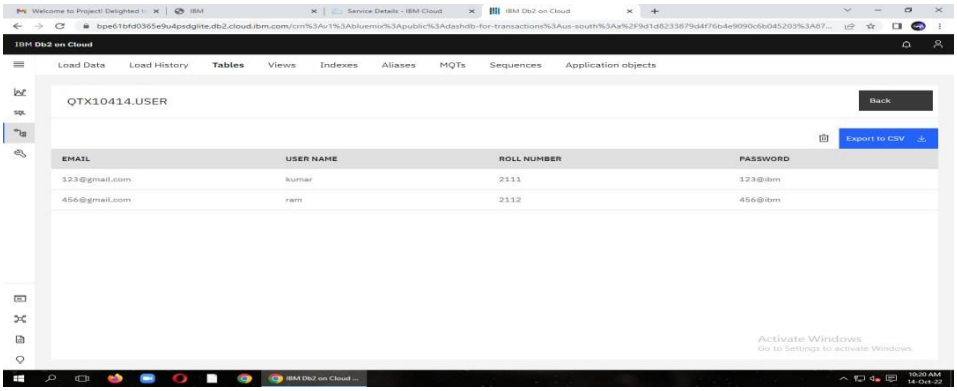


Table View:



UPDATE:

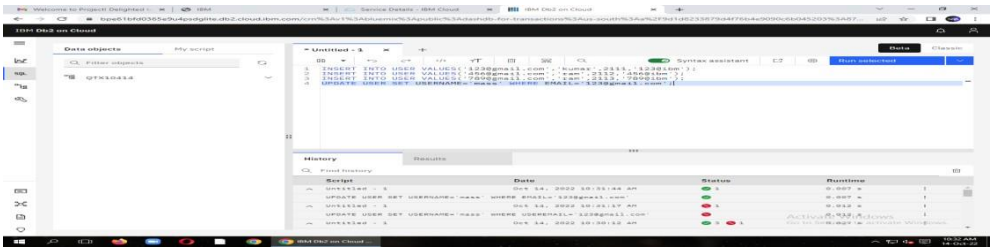
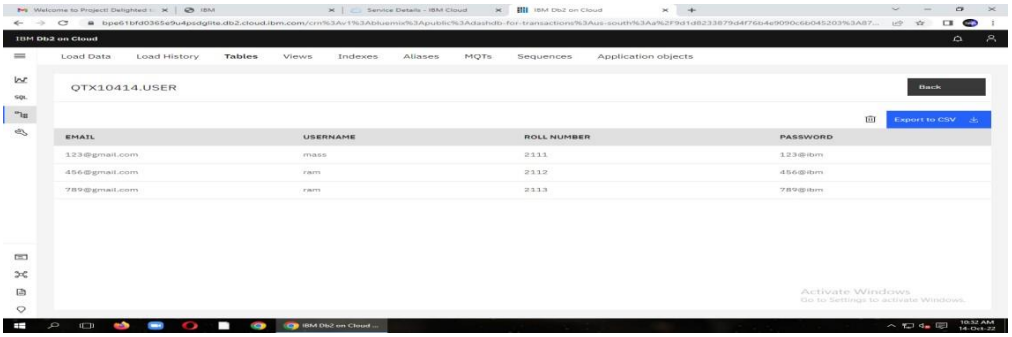


Table View:



DELETE:

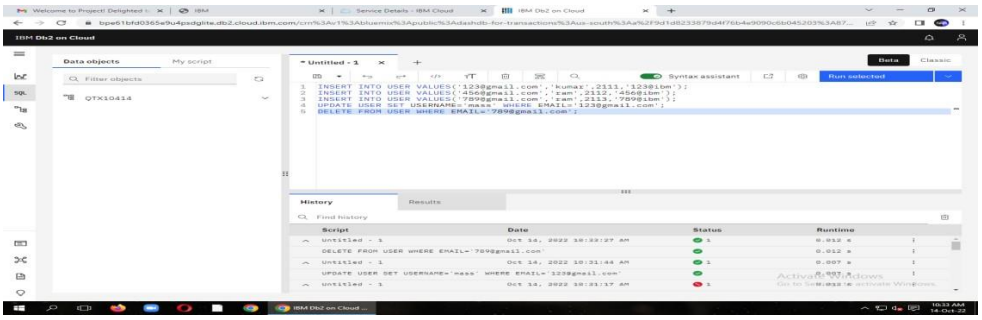
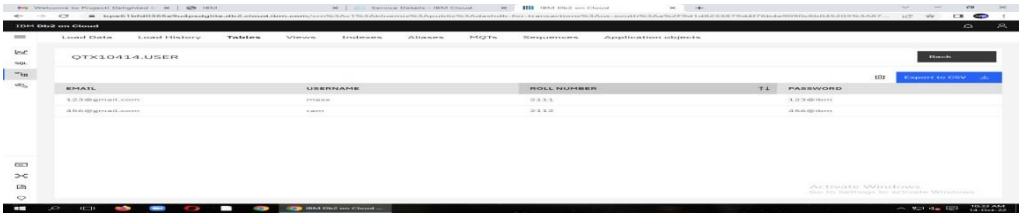


TABLE View:



3. Connect python with db2.

Solution:

```
import ibm_db
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=b70af05b-76e4-4bca-a1f5-23dbb4c6a74e.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32716;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;PROTOCOL=TCPIP;UID=cjt21363;PWD=dEPd3PJqjDnLiQZm",'','')
```

4. Create a flask app with the registration page. Login page and the welcome page. By default load the registration page once the user enters all the fields, store the data in database and navigate to login page. Authenticate user username and password. If the user is valid so the welcome page.

Solution:

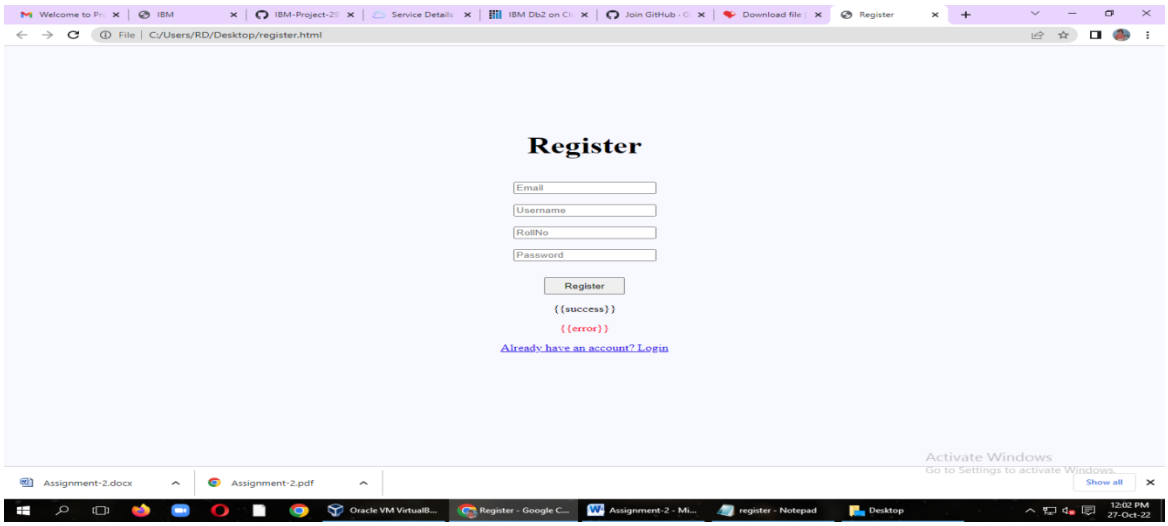
app.py

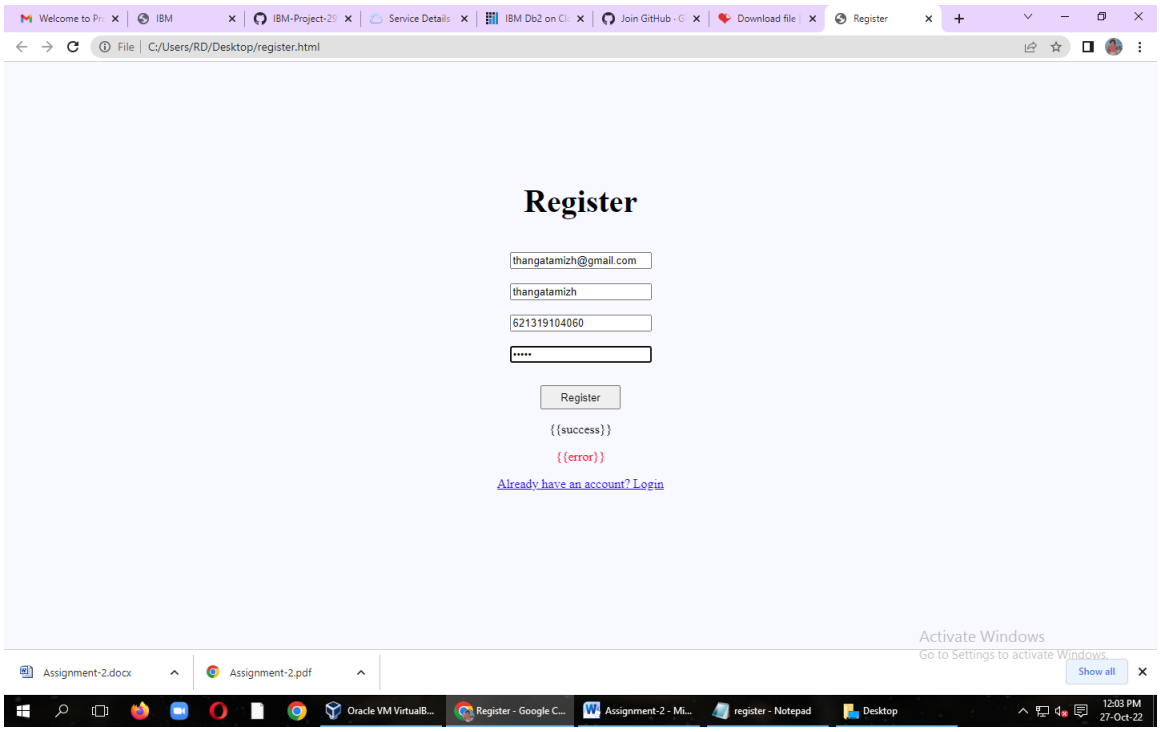
```
from flask import Flask, render_template, request, redirect, url_for, session

import ibm_db
import bcrypt
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=b70af05b-76e4-4bca-a1f5-23dbb4c6a74e.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32716;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;PROTOCOL=TCPIP;UID=cjt21363;PWD=dEPd3PJqjDnLiQZm",'','')


# url_for('static', filename='style.css')

app = Flask(_name_)
app.secret_key = b'_5#y2L"F4Q8z\n\xec]/'


@app.route("/",methods=['GET'])
def home():
    if 'email' not in session:
      return redirect(url_for('login'))
    return render_template('home.html',name='Home')

@app.route("/register",methods=['GET','POST'])
def register():
  if request.method == 'POST':
    email = request.form['email']
    username = request.form['username']
```

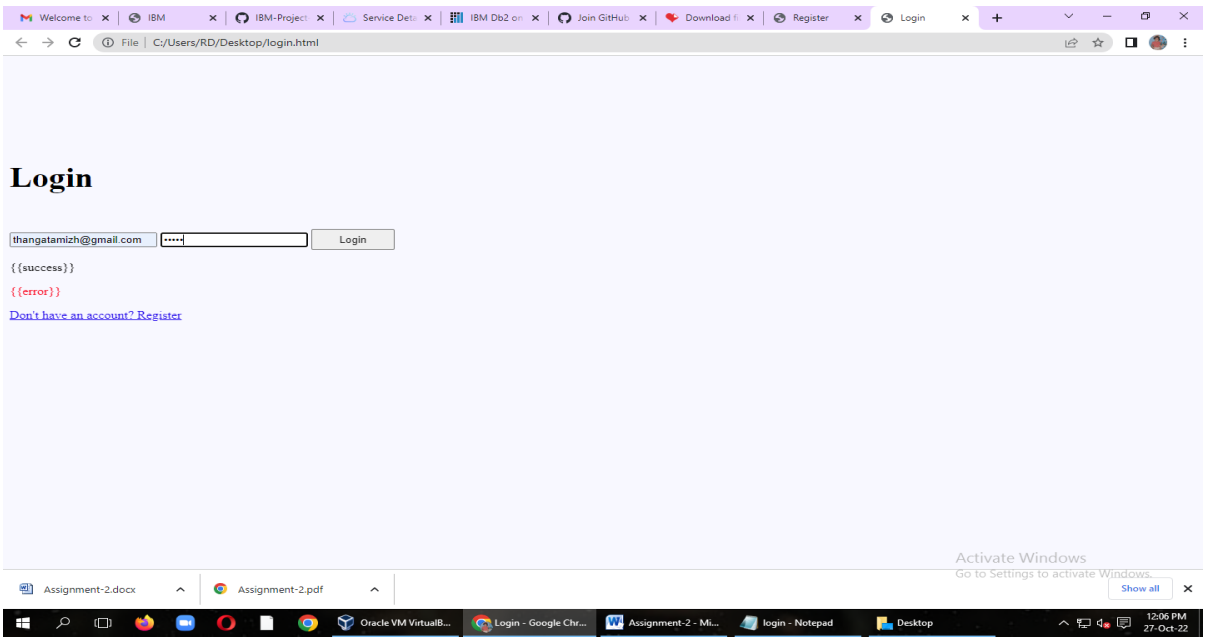
```
    rollNo = request.form['rollNo']
    password = request.form['password']

    if not email or not username or not rollNo or not password:
      return render_template('register.html',error='Please fill all fields')

    hash=bcrypt.hashpw(password.encode('utf-8'),bcrypt.gensalt())

    query = "SELECT * FROM USER WHERE email=? OR ROLLNO=?"
    stmt = ibm_db.prepare(conn, query)
    ibm_db.bind_param(stmt,1,email)
    ibm_db.bind_param(stmt,2,rollNo)
    ibm_db.execute(stmt)
    isUser = ibm_db.fetch_assoc(stmt)

    if not isUser:
      insert_sql = "INSERT INTO USER(EMAIL, USERNAME, PASSWORD, ROLLNO) VALUES (?,?,?,?)"
      prep_stmt = ibm_db.prepare(conn, insert_sql)
      ibm_db.bind_param(prep_stmt, 1, email)
      ibm_db.bind_param(prep_stmt, 2, username)
      ibm_db.bind_param(prep_stmt, 3, hash)
      ibm_db.bind_param(prep_stmt, 4, rollNo)
      ibm_db.execute(prep_stmt)
      return render_template('register.html',success="You can login")
    else:
      return render_template('register.html',error='Invalid Credentials')

  return render_template('register.html',name='Home')

@app.route("/login",methods=['GET','POST'])
def login():
    if request.method == 'POST':
      email = request.form['email']
      password = request.form['password']

      if not email or not password:
        return render_template('login.html',error='Please fill all fields')
      query = "SELECT * FROM USER WHERE email=?"
      stmt = ibm_db.prepare(conn, query)
      ibm_db.bind_param(stmt,1,email)
      ibm_db.execute(stmt)
      isUser = ibm_db.fetch_assoc(stmt)
      print(isUser,password)

      if not isUser:
        return render_template('login.html',error='Invalid Credentials')

      isPasswordMatch = bcrypt.checkpw(password.encode('utf-8'),isUser['PASSWORD'].encode('utf-8'))

      if not isPasswordMatch:
        return render_template('login.html',error='Invalid Credentials')

      session['email'] = isUser['EMAIL']
      return redirect(url_for('home'))

    return render_template('login.html',name='Home')
```

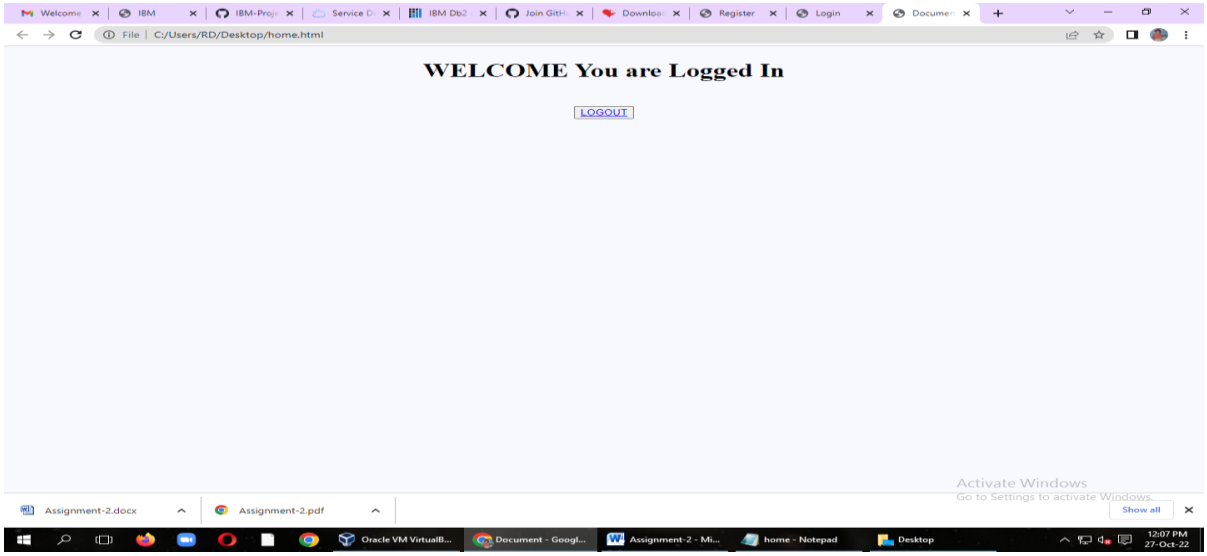
```
@app.route('/logout')
def logout():
    session.pop('email', None)
    return redirect(url_for('login'))
if __name__== "_main_":
    app.run(debug=True)
```

OUTPUT:

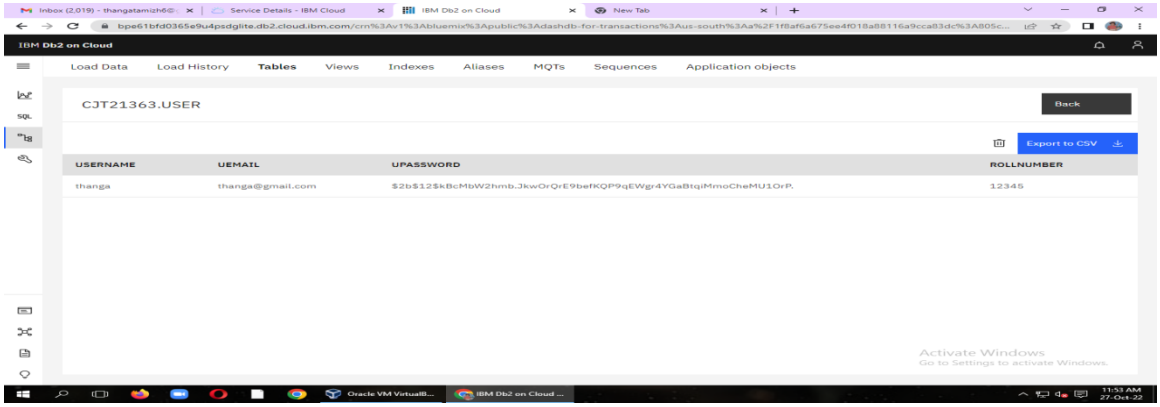





Login
thangatamizh@gmail.com
Login
{{success}}
{{error}}
Don't have an account? Register


WELCOME You are Logged In
LOGOUT

Database:


IBM Db2 on Cloud
Load Data
Load History
Tables
Views
Indexes
Aliases
MQTs
Sequences
Application objects
CJT21363.USER
Back
Export to CSV
USERNAME
UEMAIL
UPASSWORD
ROLLNUMBER
thanga
thanga@gmail.com
12345