

ASSIGNMENT - 3

TEAM ID : PNT2022TMID19417

PROJECT NAME : PLASMA DONOR APPLICATION

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

QUERY:

INSERT INTO STUDENTS

```
VALUES(31,'RITHIGA','rithiga@gmail.com','rithi@2'),  
(51,'KALAIYARASI','kalaiyarasi@gmail.com','kalai@2'),  
(61,'SRIMATHI','srinathi@gmail.com','sri@246'),  
(33,'LAVANYA','lavanya@gmail.com','lav@123'),  
(37,'RAHUL','rahul@gmail.com','rahul@43'),  
(39,'MADHAN','madhan@gmail.com','madhan@20'),  
(45,'RAM','ram@gmail.com','ram@209');
```

OUTPUT :

The screenshot displays the IBM Db2 on Cloud web interface. On the left, the 'Data objects' panel shows a table named 'STUDENTS' with a primary key 'YJC91837'. The main editor area contains the following SQL query:

```
1 INSERT INTO STUDENTS  
2 VALUES(31,'RITHIGA','rithiga@gmail.com','rithi@2'),  
3 (51,'KALAIYARASI','kalaiyarasi@gmail.com','kalai@2'),  
4 (61,'SRIMATHI','srinathi@gmail.com','sri@246'),  
5 (33,'LAVANYA','lavanya@gmail.com','lav@123'),  
6 (37,'RAHUL','rahul@gmail.com','rahul@43'),  
7 (39,'MADHAN','madhan@gmail.com','madhan@20'),  
8 (45,'RAM','ram@gmail.com','ram@209');
```

Below the editor, the 'History' panel shows the execution results:

Script	Date	Status	Runtime
Untitled - 1	Oct 10, 2022 6:40:13 PM	✓ 1	0.015 s
INSERT INTO STUDENTS VALUES(31,'RITHIGA','rithiga@gmail.com','rithi@2'),...		✓	0.015 s

The bottom of the screen shows the Windows taskbar with the system clock indicating 18:40 on 10-10-2022.

IBM Db2 on Cloud

Load Data Load History **Tables** Views Indexes Aliases MQTs Sequences Application objects

YCJ91837.STUDENTS

Back

Export to CSV

ROLL_NO	NAME	EMAIL	PASSWORD
31	RITHIGA	rithiga@gmail.com	rithi@2
33	LAVANYA	lavanya@gmail.com	lav@123
37	RAHUL	rahul@gmail.com	rahul@43
39	MADHAN	madhan@gmail.com	madhan@20
45	RAM	ram@gmail.com	ram@209
51	KALAIYARASI	kalaiyarasi@gmail.com	kalai@2
61	SRIMATHI	srimathi@gmail.com	sri@246

2. Perform UPDATE, DELETE queries with user table.

QUERY :

```
UPDATE STUDENTS
SET NAME='RAKESH'
WHERE ROLL_NO =39;
```

```
DELETE FROM STUDENT
WHERE ROLLNO=45;
```

OUTPUT :

IBM Db2 on Cloud interface showing a SQL script execution. The script is titled "STUDENTS" and contains SQL commands to insert, update, and delete data from the STUDENTS table.

```
1 INSERT INTO STUDENTS
2 VALUES(31,'RITHIGA','rithiga@gmail.com','rithi@2'),
3 (51,'KALAIYARASI','kalaiyarasi@gmail.com','kalai@2'),
4 (61,'SRIMATHI','srimathi@gmail.com','sri@246'),
5 (33,'LAVANYA','lavanya@gmail.com','lav@123'),
6 (37,'RAHUL','rahul@gmail.com','rahul@43'),
7 (39,'RADHAN','madhan@gmail.com','madhan@20'),
8 (45,'RAM','ram@gmail.com','ram@209');
9
10 UPDATE STUDENTS
11 SET NAME='RAKESH'
12 WHERE ROLL_NO =39;
13
14 DELETE FROM STUDENT
15 WHERE ROLLNO=45;
16
```

The History tab shows the execution results:

Script	Date	Status	Runtime
STUDENTS	Oct 10, 2022 6:45:25 PM	2 1	0.029 s
INSERT INTO STUDENTS VALUES(31,'RITHIGA','rithiga@gmail.com','rithi@2')...			0.010 s
UPDATE STUDENTS SET NAME='RAKESH' WHERE ROLL_NO =39			0.007 s

IBM Db2 on Cloud interface showing the data loaded into the YCJ91837.STUDENTS table. The table contains 7 rows of data with columns ROLL_NO, NAME, EMAIL, and PASSWORD.

ROLL_NO	NAME	EMAIL	PASSWORD
31	RITHIGA	rithiga@gmail.com	rithi@2
33	LAVANYA	lavanya@gmail.com	lav@123
37	RAHUL	rahul@gmail.com	rahul@43
39	RAKESH	madhan@gmail.com	madhan@20
45	RAM	ram@gmail.com	ram@209
51	KALAIYARASI	kalaiyarasi@gmail.com	kalai@2
61	SRIMATHI	srimathi@gmail.com	sri@246

3. CONNECT PYTHON TO db2:

CODE :

```
import ibm_db

hostname = '9938aec0-8105-433e-8bf9-
0fbb7e483086.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud'

uid = 'qfk33398'

pwd = 'jnfFMaLIMeTZcout'

driver = "{IBM DB2 ODBC DRIVER}"

db = 'bludb'

port = '32459'

protocol = 'TCPIP'

cert = 'CRT1.crt'

dsn = (
"DATABASE = {0};"
"HOSTNAME = {1};"
"PORT = {2};"
"UID = {3};"
"SECURITY = SSL;"
"SSLServerCertificate = {4};"
"PWD = {5};"
).format(db, hostname, port, uid, cert, pwd)

print(dsn)

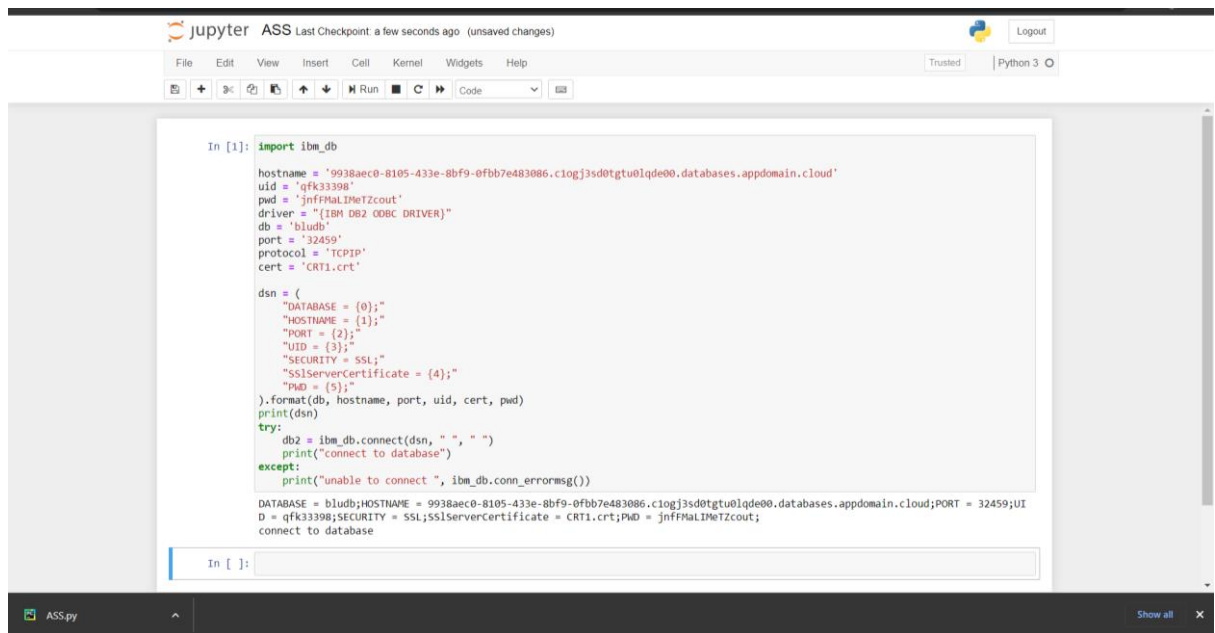
try:

    db2 = ibm_db.connect(dsn, " ", " ")

    print("connect to database")

except:

    print("unable to connect ", ibm_db.conn_errormsg())
```



The image shows a Jupyter Notebook interface with a menu bar (File, Edit, View, Insert, Cell, Kernel, Widgets, Help) and a toolbar with icons for file operations, running code, and other functions. The notebook is titled "jupyter ASS" and shows a "Last Checkpoint: a few seconds ago (unsaved changes)". The code cell contains the following Python code:

```
In [1]: import ibm_db

hostname = '9938aec0-8105-433e-8bf9-0fbb7e483086.clogj3sd0tgu0lqde00.databases.appdomain.cloud'
uid = 'qfk333398'
pwd = 'jnffMaIMeTZcout'
driver = "{IBM DB2 ODBC DRIVER}"
db = 'bludb'
port = '32459'
protocol = 'TCP/IP'
cert = 'CRT1.crt'

dsn = (
    "DATABASE = {};"
    "HOSTNAME = {};"
    "PORT = {};"
    "UID = {};"
    "SECURITY = SSL;"
    "SSLServerCertificate = {};"
    "PWD = {};"
).format(db, hostname, port, uid, cert, pwd)
print(dsn)
try:
    db2 = ibm_db.connect(dsn, " ", " ")
    print("connect to database")
except:
    print("unable to connect ", ibm_db.conn_errormsg())

DATABASE = bludb;HOSTNAME = 9938aec0-8105-433e-8bf9-0fbb7e483086.clogj3sd0tgu0lqde00.databases.appdomain.cloud;PORT = 32459;UID = qfk333398;SECURITY = SSL;SSLServerCertificate = CRT1.crt;PWD = jnffMaIMeTZcout;
connect to database
```

The output of the code cell shows the DSN string and the connection attempt. The status bar at the bottom indicates the file is "ASS.py" and there is a "Show all" button.

4. Create a flask app with registration page, login page and welcome page.

4.about.html

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width,initial-scale=1">
  <title>About Page</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta2/dist/css/bootstrap.min.css" rel="stylesheet">
</head>

<body>

  <nav class="navbar navbar-expand-lg bg-light" style="background-color:
#b5dbf7;">
    <!-- Navbar content -->

    <div class="container-fluid">
      <div class="collapse navbar-collapse" id="navbarNavAltMarkup">
        <div class="navbar-nav">
          <a class="nav-link " href="home.html">Home</a>
          <a class="nav-link active" aria-current="page"
href="#">About</a>
          <a class="nav-link" href="signin.html">Sign In</a>
          <a class="nav-link" href="signup.html">Sign up</a>
        </div>
      </div>
    </div>

  </nav>
  <br><br>
  <footer>
    International Business Machines Corporation is an American
    multinational technology corporation headquartered in Armonk, New York, with
    operations in over 171 countries.
  </footer>

</body>

</html>
```

Home.html

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width,initial-scale=1">
  <title>Home Page</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta2/dist/css/bootstrap.min.css" rel="stylesheet">
</head>

<body>

  <nav class="navbar navbar-expand-lg bg-light" style="background-color:
#e3f2fd;">
    <!-- Navbar content -->

    <div class="container-fluid">
      <div class="collapse navbar-collapse" id="navbarNavAltMarkup">
        <div class="navbar-nav">
          <a class="nav-link active" aria-current="page"
href="#">Home</a>
          <a class="nav-link" href="about.html">About</a>
          <a class="nav-link" href="signin.html">SignIn</a>
          <a class="nav-link" href="signup.html">SignUp</a>
        </div>
      </div>
    </div>
  </nav>
  <br><br>
  <div>
    <h4>
      <b>Welcome to IBM!!!</B>
    </h4>
  </div>

</body>

</html>
```

Signin.html

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width,initial-scale=1">
  <title>SignIn</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-beta2/dist/css/bootstrap.min.css" rel="stylesheet">
</head>

<body>

  <nav class="navbar navbar-expand-lg bg-light" style="background-color:
#e3f2fd;">
    <!-- Navbar content -->

    <div class="container-fluid">
      <div class="collapse navbar-collapse" id="navbarNavAltMarkup">
        <div class="navbar-nav">
          <a class="nav-link " href="home.html">Home</a>
          <a class="nav-link" href="about.html">About</a>
          <a class="nav-link active" aria-current="page"
href="#">SignIn</a>
          <a class="nav-link" href="signup.html">SignUp</a>
        </div>
      </div>
    </div>

  </nav>
  <div class="text-center my-5"
style="background-image:
url('https://png.pngtree.com/thumb_back/fh260/background/20200714/pngtree-
modern-double-color-futuristic-neon-background-image_351866.jpg');
background-repeat: no-repeat;
background-size: cover;">

    <section class="h-100">
      <div class="container h-100">
        <div class="row justify-content-sm-center h-100">
          <div class="col-xxl-4 col-xl-5 col-lg-5 col-md-7 col-sm-
9">

            <div class="text-center my-5"></div>
            <div class="card shadow-lg">
              <div class="card-body p-5">
```



```

<h1 class="fs-4 card-title fw-bold mb-
4">Login</h1>
<form method="POST" class="needs-validation"
novalidate="" autocomplete="off">
    <div class="mb-3">
        <label class="mb-2 text-muted"
for="email">E-Mail Address</label>
        <input id="email" type="email"
class="form-control" name="email" value=""
required autofocus>
        <div class="invalid-feedback">
            Email is invalid
        </div>
    </div>

    <div class="mb-3">
        <div class="mb-2 w-100">
            <label class="text-muted"
for="password">Password</label>
            <a href="forgot.html"
class="float-end">
                Forgot Password?
            </a>
        </div>
        <input id="password" type="password"
class="form-control" name="password"
required>
        <div class="invalid-feedback">
            Password is required
        </div>
    </div>

    <div class="d-flex align-items-center">
        <div class="form-check">
            <input type="checkbox"
name="remember" id="remember"
class="form-check-input">
            <label for="remember" class="form-
check-label">Remember Me</label>
        </div>
        <button type="submit" class="btn btn-
primary ms-auto">
            Login
        </button>
    </div>
</form>
</div>
<div class="card-footer py-3 border-0">

```

```
<div class="text-center">  
    Don't have an account? <a  
href="signup.html" class="text-dark">Create  
        One</a>  
    </div>  
</div>  
</div>  
</div>  
</div>  
</div>  
</section>  
</div>  
  
</body>  
  
</html>
```

Signup.html

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width,initial-scale=1">
  <title>SignUp</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-beta2/dist/css/bootstrap.min.css" rel="stylesheet">
</head>

<body>

  <nav class="navbar navbar-expand-lg bg-light" style="background-color:
#e3f2fd;">
    <!-- Navbar content -->

    <div class="container-fluid">
      <div class="collapse navbar-collapse" id="navbarNavAltMarkup">
        <div class="navbar-nav">
          <a class="nav-link" href="home.html">Home</a>
          <a class="nav-link" href="about.html">About</a>
          <a class="nav-link" href="signin.html">SignIn</a>
          <a class="nav-link active" aria-current="page"
href="#">SignUp</a>
        </div>
      </div>
    </div>
  </nav>
  <div class="text-center my-5"
style="background-image:
url('https://png.pngtree.com/thumb_back/fh260/background/20200714/pngtree-
modern-double-color-futuristic-neon-background-image_351866.jpg');
background-repeat: no-repeat;
background-size: cover;">
    <section class="h-100">
      <div class="container h-100">
        <div class="row justify-content-sm-center h-100">
          <div class="col-xxl-4 col-xl-5 col-lg-5 col-md-7 col-sm-
9">

            <div class="text-center my-5"></div>
            <div class="card shadow-lg">
              <div class="card-body p-5">
                <h1 class="fs-4 card-title fw-bold mb-
4">Register</h1>

                <form method="POST" class="needs-validation"
novalidate="" autocomplete="off">
```

```

        <div class="mb-3">
            <label class="mb-2 text-muted"
for="name">Name</label>
            <input id="name" type="text"
class="form-control" name="name" value="" required
autofocus>
            <div class="invalid-feedback">
                Name is required
            </div>
        </div>

        <div class="mb-3">
            <label class="mb-2 text-muted"
for="email">E-Mail Address</label>
            <input id="email" type="email"
class="form-control" name="email" value=""
required>
            <div class="invalid-feedback">
                Email is invalid
            </div>
        </div>

        <div class="mb-3">
            <label class="mb-2 text-muted"
for="password">Password</label>
            <input id="password" type="password"
class="form-control" name="password"
required>
            <div class="invalid-feedback">
                Password is required
            </div>
        </div>

        <p class="form-text text-muted mb-3">
            By registering you agree with our
terms and condition.
        </p>

        <div class="align-items-center d-flex">
            <button type="submit" class="btn btn-
primary ms-auto">
                Register
            </button>
        </div>
    </form>
</div>
<div class="card-footer py-3 border-0">
    <div class="text-center">

```

```
<div>  
    <a href="#" class="text-dark">Login</a>  
    </div>  
</div>  
  
</div>  
</div>  
</section>  
</div>  
  
</body>  
  
</html>
```

app.py

```
from flask import Flask, render_template

app = Flask(__name__)

@app.route("/")
@app.route("/home")
def home():
    return render_template("home.html")

@app.route("/about")
def about():
    return render_template("about.html")

@app.route("/signin")
def signin():
    return render_template("signin.html")

@app.route("/signup")
def signup():
    return render_template("signup.html")
```