

ASSIGNMET – 3

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PROJECT NAME	SKILL / JOB RECOMMENDER APPLICATION

1. CREATE USER TABLE WITH EMAIL, USERNAME,ROLL NUMBER ,PASSWORD.

The screenshot shows the IBM Db2 on Cloud web interface. The 'Tables' tab is selected, displaying a list of tables in the 'PKV26008' schema. The 'USER' table is selected. The 'Table definition' panel on the right shows the structure of the 'USER' table:

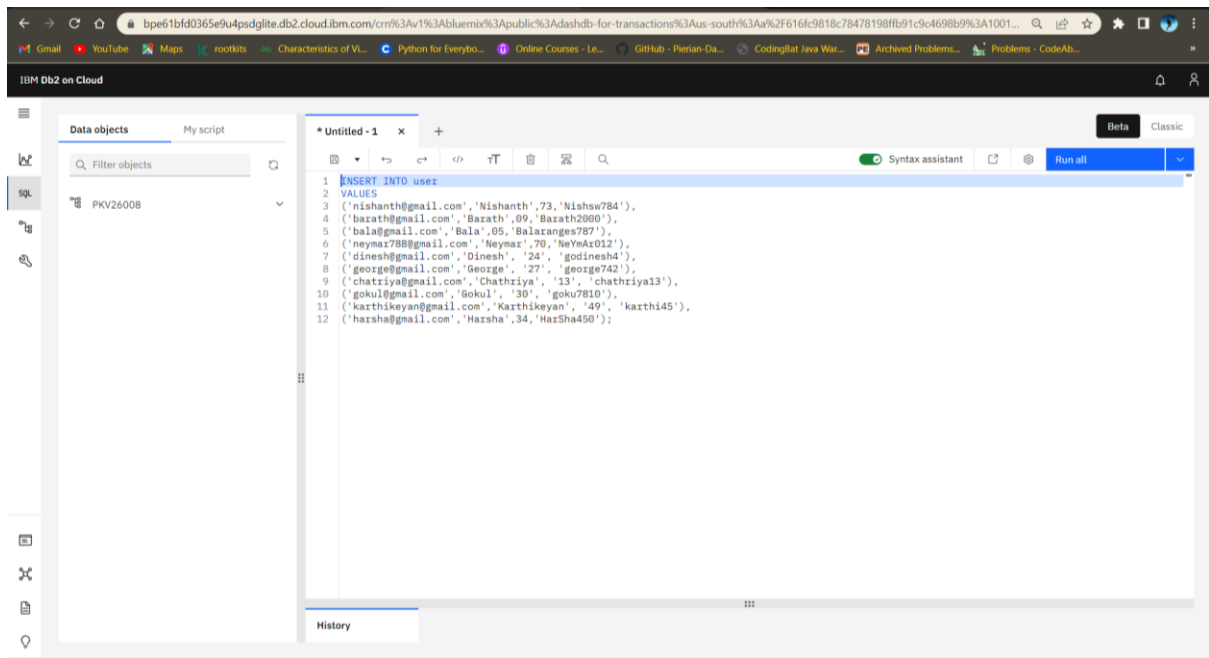
Name	Data type	Nullable	Length	Scale
EMAIL	VARCHAR	Y	32	0
NAME	VARCHAR	Y	32	0
roll number	VARCHAR	Y	32	0
PASSWORD	VARCHAR	Y	32	0

Query to INSERT :

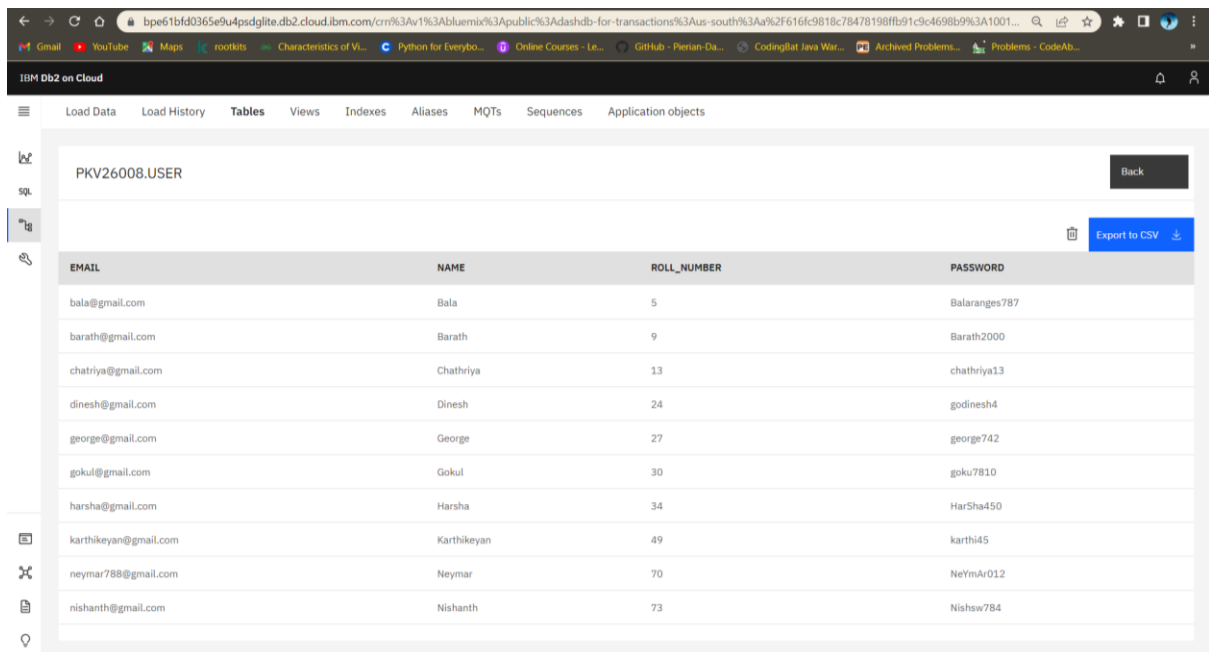
INSERT INTO user

VALUES

('nishanth@gmail.com','Nishanth',73,'Nishsw784'),
('barath@gmail.com','Barath',09,'Barath2000'),
('bala@gmail.com','Bala',05,'Balaranges787'),
('neymar788@gmail.com','Neymar',70,'NeYmAr012'),
('dinesh@gmail.com','Dinesh', '24', 'godinesh4'),
('george@gmail.com','George', '27', 'george742'),
('chatriya@gmail.com','Chathriya', '13', 'chathriya13'),
('gokul@gmail.com','Gokul', '30', 'goku7810'),
('karthikeyan@gmail.com','Karthikeyan', '49', 'karthi45'),
('harsha@gmail.com','Harsha',34,'HarSha450');



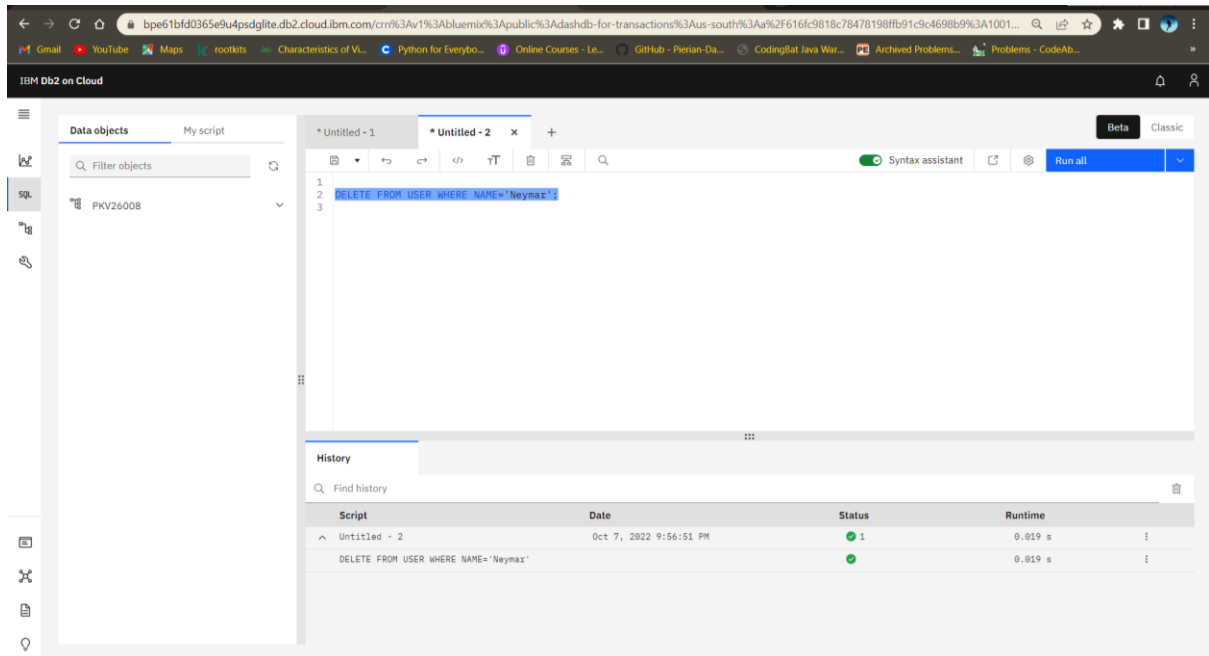
After inserting the details or values into the Table :



2. Perform UPDATE and DELETE queries with user table.

Query to Delete :

DELETE FROM USER WHERE NAME='Neymar';

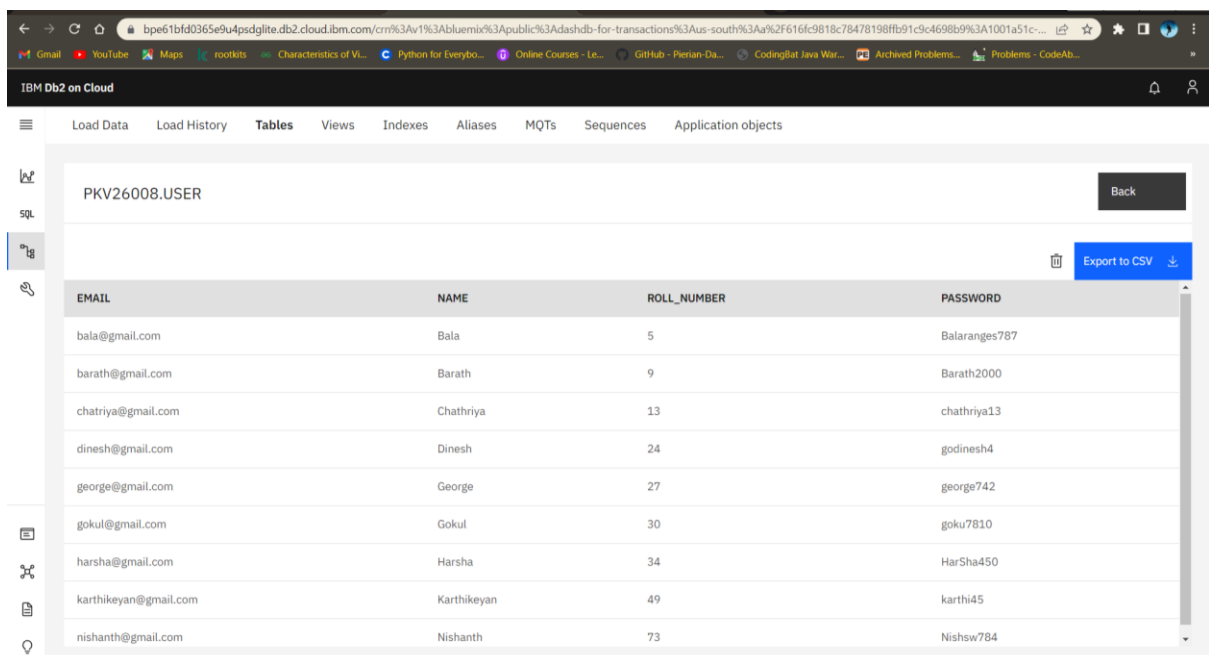


The screenshot shows the IBM Db2 on Cloud web interface. On the left, the 'Data objects' panel shows a table named 'PKV26008'. The main area displays a SQL script in a text editor with the following content:

```
1  
2 DELETE FROM USER WHERE NAME='Neymar';  
3
```

Below the script editor, the 'History' tab shows a table of executed scripts:

Script	Date	Status	Runtime
Untitled - 2	Oct 7, 2022 9:56:51 PM	✓ 1	0.019 s
DELETE FROM USER WHERE NAME='Neymar'		✓	0.019 s



The screenshot shows the IBM Db2 on Cloud web interface displaying the contents of the 'PKV26008.USER' table. The table has four columns: EMAIL, NAME, ROLL_NUMBER, and PASSWORD. The data is as follows:

EMAIL	NAME	ROLL_NUMBER	PASSWORD
bala@gmail.com	Bala	5	Balaranges787
barath@gmail.com	Barath	9	Barath2000
chatriya@gmail.com	Chathriya	13	chathriya13
dinesh@gmail.com	Dinesh	24	godinesh4
george@gmail.com	George	27	george742
gokul@gmail.com	Gokul	30	goku7810
harsha@gmail.com	Harsha	34	HarSha450
karthikeyan@gmail.com	Karthikeyan	49	karthi45
nishanth@gmail.com	Nishanth	73	Nishsw784

Query to update :

UPDATE user

SET NAME = 'Balakumaran'

WHERE email = 'bala@gmail.com';

The screenshot shows the IBM Db2 on Cloud SQL editor interface. On the left, the 'Data objects' pane shows a table named 'PKV26008'. The main editor area shows a script with the following SQL query:

```
1 UPDATE user
2 SET NAME = 'Balakumaran'
3 WHERE email = 'bala@gmail.com';
```

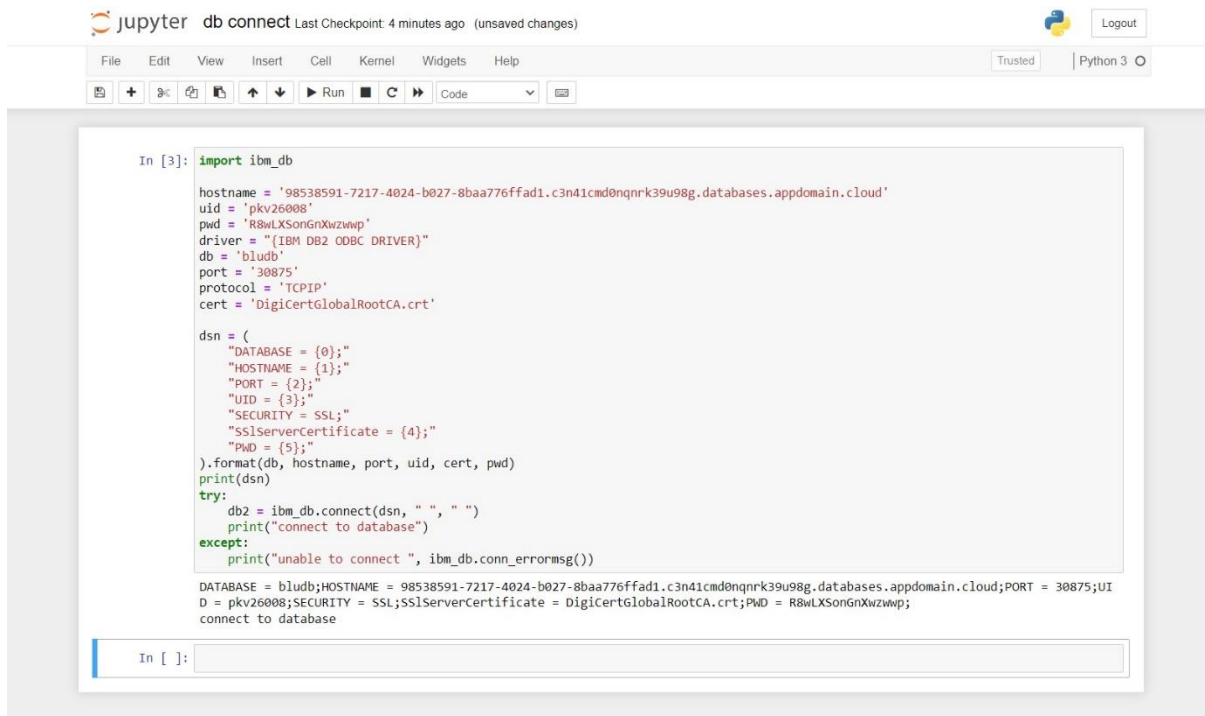
Below the script, the 'History' tab shows the execution results:

Script	Date	Status	Runtime
Untitled - 3	Oct 7, 2022 10:07:22 PM	1	0.019 s
UPDATE user SET NAME = 'Balakumaran' WHERE email = 'bala@gmail.com'			0.019 s

The screenshot shows the IBM Db2 on Cloud SQL editor interface displaying the results of the UPDATE query. The 'Data objects' pane shows the table 'PKV26008.USER'. The main editor area shows the results of the query, which is a table with 4 columns: EMAIL, NAME, ROLL_NUMBER, and PASSWORD. The results are as follows:

EMAIL	NAME	ROLL_NUMBER	PASSWORD
bala@gmail.com	Balakumaran	5	Balaranges787
barath@gmail.com	Barath	9	Barath2000
chatriya@gmail.com	Chathriya	13	chathriya13
dinesh@gmail.com	Dinesh	24	godinesh4
george@gmail.com	George	27	george742
gokul@gmail.com	Gokul	30	goku7810
harsha@gmail.com	Harsha	34	HarSha450
karthikeyan@gmail.com	Karthikeyan	49	karthi45
nishanth@gmail.com	Nishanth	73	Nishsw784

3. Connect python to db2.



The image shows a Jupyter Notebook interface with a code cell containing Python code to connect to a DB2 database. The code defines variables for database connection parameters and uses the `ibm_db` library to establish the connection. The output of the code cell shows the DSN string and the connection status.

```
In [3]: import ibm_db

hostname = '98538591-7217-4024-b027-8baa776ffad1.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud'
uid = 'pkv26008'
pwd = 'R8wLXSonGnXwzwwp'
driver = "{IBM DB2 ODBC DRIVER}"
db = 'bludb'
port = '30875'
protocol = 'TCPIP'
cert = 'DigiCertGlobalRootCA.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())

DATABASE = bludb;HOSTNAME = 98538591-7217-4024-b027-8baa776ffad1.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud;PORT = 30875;UID = pkv26008;SECURITY = SSL;SSLServerCertificate = DigiCertGlobalRootCA.crt;PWD = R8wLXSonGnXwzwwp;
connect to database
```

Code :

```
import ibm_db
```

```
hostname = '98538591-7217-4024-b027-8baa776ffad1.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud'
```

```
uid = 'pkv26008'
```

```
pwd = 'R8wLXSonGnXwzwwp'
```

```
driver = "{IBM DB2 ODBC DRIVER}"
```

```
db = 'bludb'
```

```
port = '30875'
```

```
protocol = 'TCPIP'
```

```
cert = 'DigiCertGlobalRootCA.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())
```

4. about.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>
</div>
</nav>
<br>
<div>
<h4>
<b>Welcome to IBM!!!</B>
</h4>
</div>
</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">
```

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>
</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">

Already have an account? Login

</div>

</div>

</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")
```