

Assignment 2

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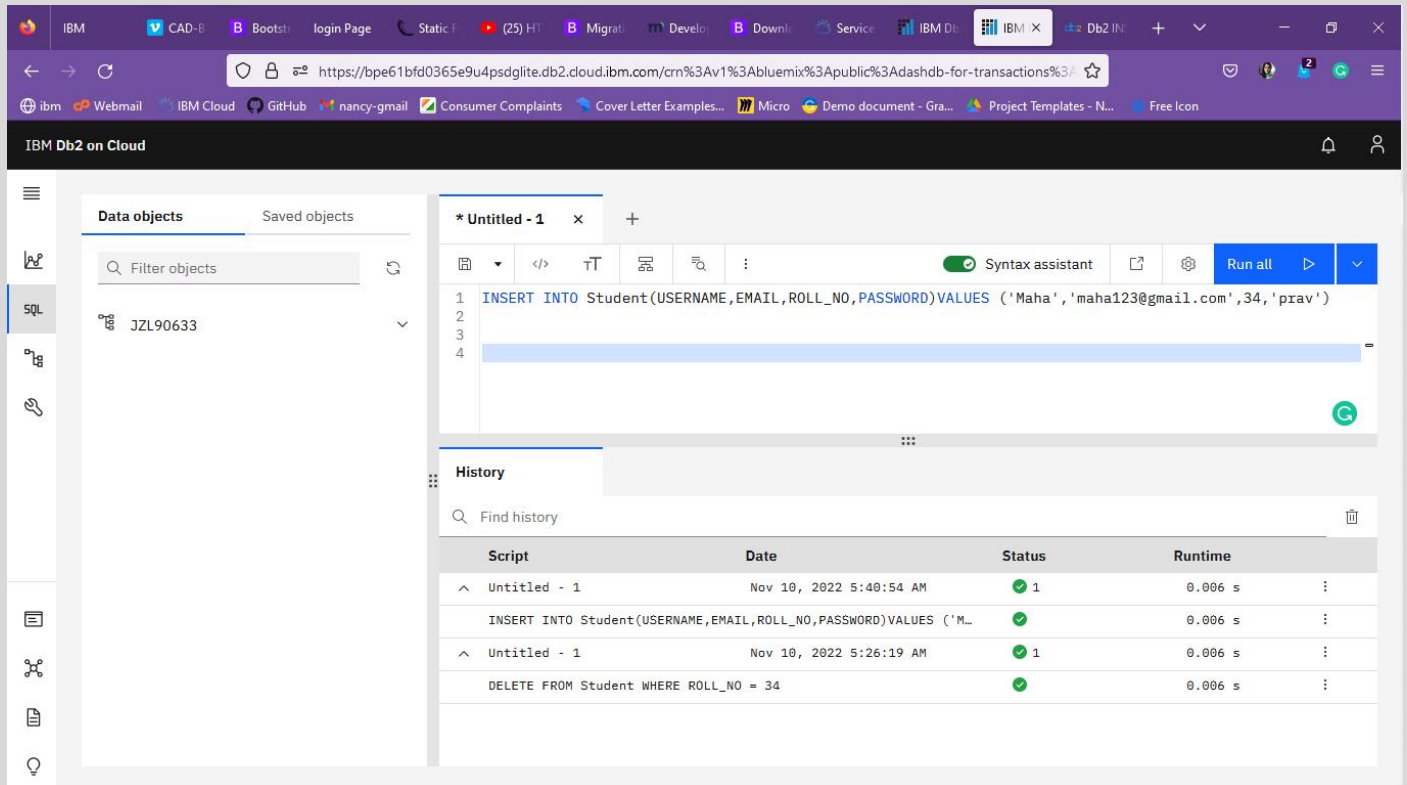
1) Create User table with email, username, roll number, password:

The screenshot displays the IBM Db2 on Cloud web interface. The top navigation bar includes links for Load Data, Load History, Tables, Views, Indexes, Aliases, MQTs, Sequences, and Application objects. The 'Tables' tab is active, showing a search bar and a 'New table' button. Below the search bar, a table lists the existing tables, with 'STUDENT' selected. The 'Table definition' panel on the right shows the schema for the 'STUDENT' table, including columns: USERNAME (VARCHAR, 32, nullable), EMAIL (VARCHAR, 32, nullable), ROLL_NO (INTEGER, nullable), and PASSWORD (VARCHAR, 32, nullable). A 'View data' button is located at the bottom of the definition panel.

Name	Data type	Nullable	Length	Scale
USERNAME	VARCHAR	Y	32	0
EMAIL	VARCHAR	Y	32	0
ROLL_NO	INTEGER	Y		0
PASSWORD	VARCHAR	Y	32	0

2) Perform UPDATE, DELETE Queries with user table:

i) INSERT



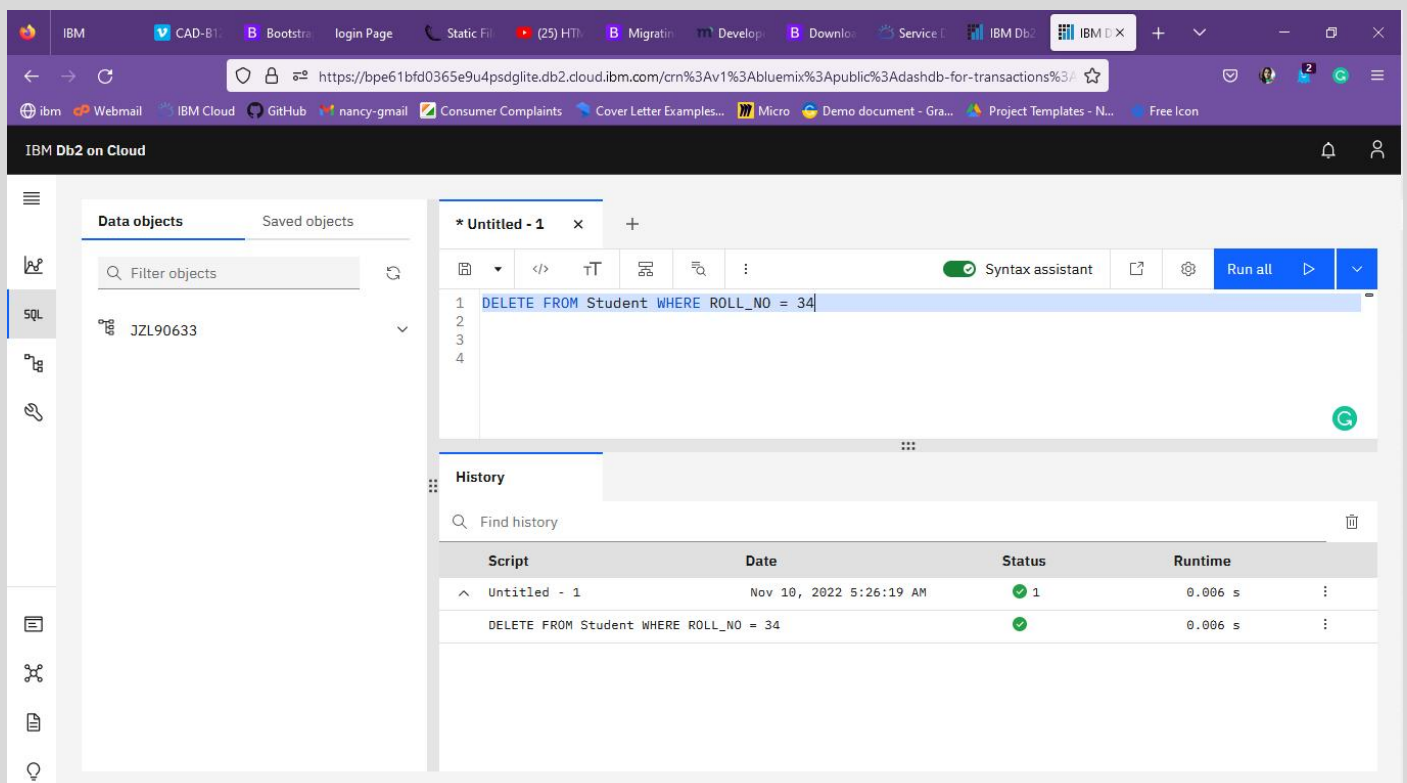
The screenshot shows the IBM Db2 on Cloud web interface. On the left, the 'Data objects' panel lists a table named 'JZL90633'. The main editor area, titled '*Untitled - 1', contains the following SQL query:

```
INSERT INTO Student (USERNAME, EMAIL, ROLL_NO, PASSWORD) VALUES ('Maha', 'maha123@gmail.com', 34, 'prav')
```

Below the editor, the 'History' panel displays a table of executed queries:

Script	Date	Status	Runtime
Untitled - 1	Nov 10, 2022 5:40:54 AM	✓ 1	0.006 s
INSERT INTO Student (USERNAME, EMAIL, ROLL_NO, PASSWORD) VALUES ('M...		✓	0.006 s
Untitled - 1	Nov 10, 2022 5:26:19 AM	✓ 1	0.006 s
DELETE FROM Student WHERE ROLL_NO = 34		✓	0.006 s

ii) DELETE



The screenshot shows the IBM Db2 on Cloud web interface. The main editor area, titled '*Untitled - 1', contains the following SQL query:

```
DELETE FROM Student WHERE ROLL_NO = 34
```

Below the editor, the 'History' panel displays a table of executed queries:

Script	Date	Status	Runtime
Untitled - 1	Nov 10, 2022 5:26:19 AM	✓ 1	0.006 s
DELETE FROM Student WHERE ROLL_NO = 34		✓	0.006 s

iii) UPDATE

The screenshot shows the IBM Db2 on Cloud web interface. The main editor displays the following SQL statement:

```
UPDATE Student SET USERNAME='Leni',EMAIL='lenitha123@gmail.com',ROLL_NO=35,PASSWORD='jsfhkwjhegh' WHERE ROLL_NO=46
```

Below the editor is a 'History' table showing the execution of several scripts:

Script	Date	Status	Runtime
Untitled - 1	Nov 10, 2022 5:51:34 AM	✓ 1	0.008 s
UPDATE Student SET USERNAME='Leni',EMAIL='lenitha123@gmail.com',ROLL_NO=35,PASSWORD='jsfh...		✓	0.008 s
Untitled - 1	Nov 10, 2022 5:40:54 AM	✓ 1	0.006 s
INSERT INTO Student(USERNAME,EMAIL,ROLL_NO,PASSWORD) VALUES ('Maha','maha123@gmail.com',34...		✓	0.006 s
Untitled - 1	Nov 10, 2022 5:26:19 AM	✓ 1	0.006 s
DELETE FROM Student WHERE ROLL_NO = 34		✓	0.006 s

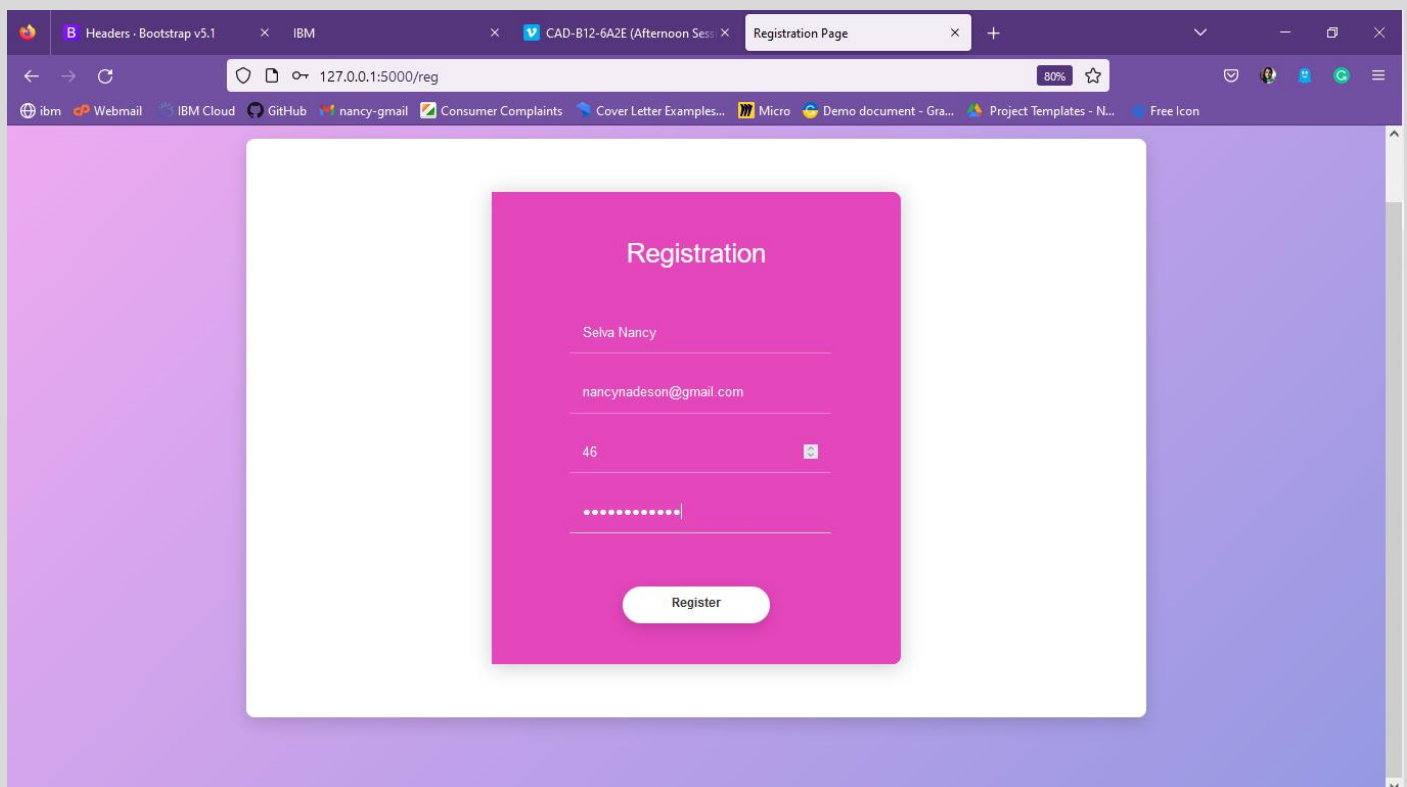
3) Connect python code to db2:

The screenshot shows a Python script named `main.py` in Visual Studio Code. The script connects to an IBM Db2 database and performs several operations:

```
import ibm_db
def list_all():
    sql = "SELECT * from Student"
    stmt = ibm_db.exec_immediate(conn,sql)
    dic = ibm_db.fetch_both(stmt)
    while dic != False:
        print(dic['EMAIL'])
        print(dic['USERNAME'])
        print(dic['ROLL_NO'])
        print(dic['PASSWORD'])
        dic = ibm_db.fetch_both(stmt)
def insert_values(email,username,roll_no,password):
    sql="INSERT INTO Student values(' ',' ',' ',' ')".format(email,username,roll_no,password)
    stmt = ibm_db.exec_immediate(conn,sql)
    print("No of affected rows:",ibm_db.num_rows(stmt))
def delete_values():
    sql="DELETE FROM Student WHERE ROLL_NO = 47"
    stmt = ibm_db.exec_immediate(conn,sql)
    print("No of affected rows:",ibm_db.num_rows(stmt))
def update_values():
    sql="UPDATE Student SET EMAIL = 'Maha123@gmail.com', USERNAME = 'maha', ROLL_NO = 34,PASSWORD = 'pravin' WHERE ROLL_NO = 35"
    stmt = ibm_db.exec_immediate(conn,sql)
    print("No of affected rows:",ibm_db.num_rows(stmt))
try:
    conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=2f3279a5-73d1-4859-88f0-a6c3e6b4b907.c3n41cmd0nqnkrk39u98g.databases.appdomain.cloud;PORT=30756")
    print("Database Connected")
    insert_values("leni@gmail.com","leni",35,"pandi")
    insert_values("shiny123.com","shiny",47,"shinebabe")
    update_values()
    #delete_values()
    list_all()
except:
    print("Connection Failed")
```

4) Create a flask app with registration page, login page and 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 with username and password. If the user is valid show the welcome page:

i) Registration Page

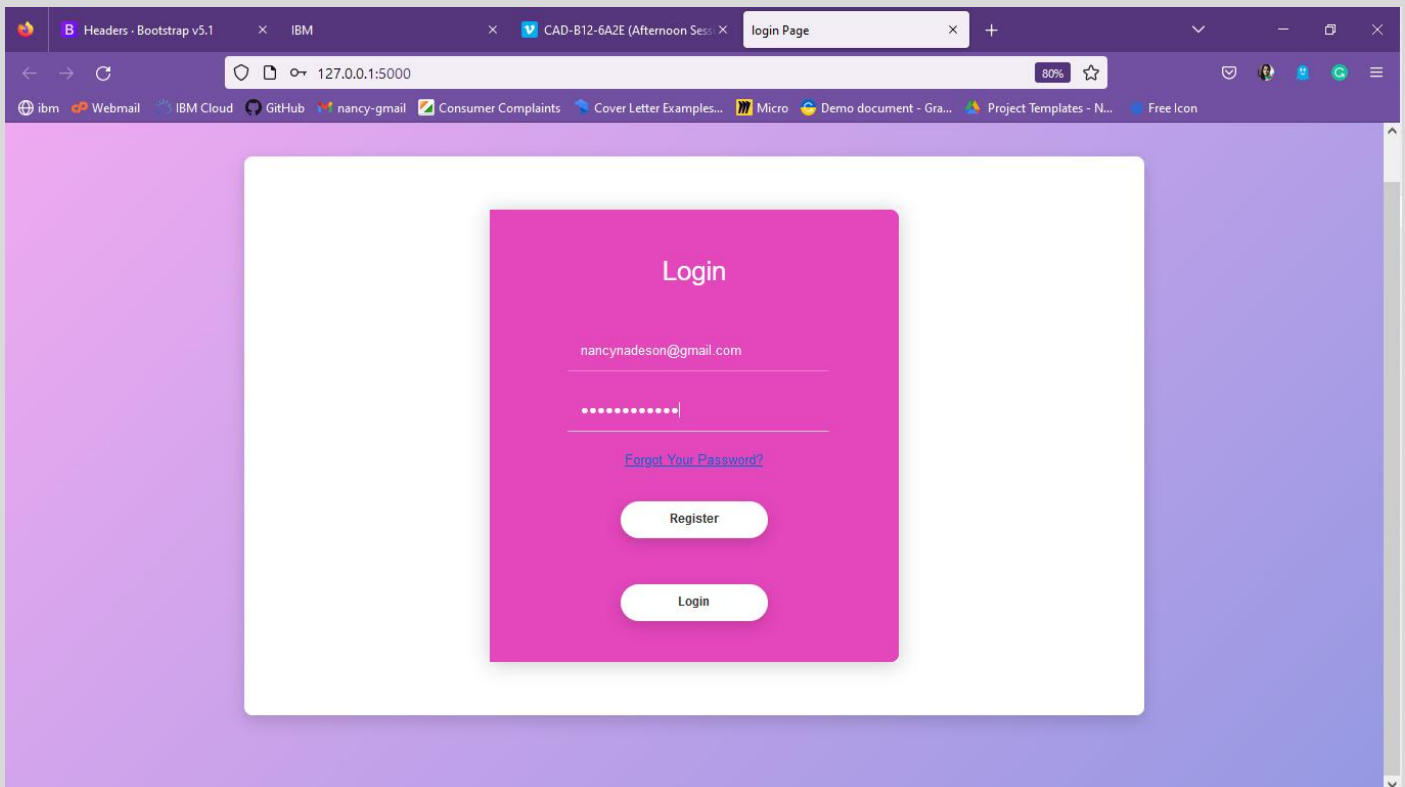


The screenshot shows a web browser window with a purple header bar. The address bar displays the URL `127.0.0.1:5000/reg`. The browser's tab bar includes several open tabs: "B Headers - Bootstrap v5.1", "IBM", "CAD-B12-6A2E (Afternoon Ses...", and "Registration Page". The main content area features a registration form with a pink background and a white border. The form is titled "Registration" and contains the following fields:

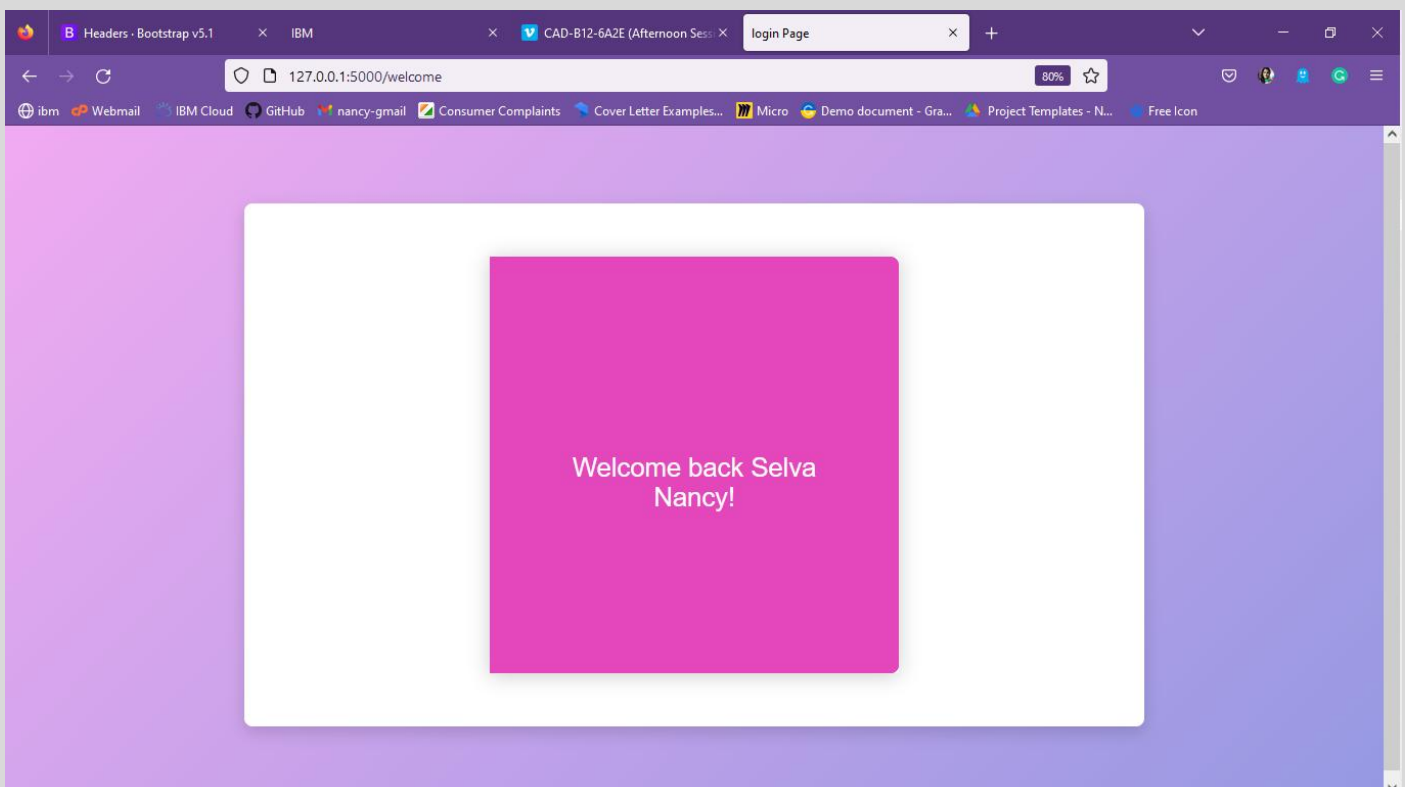
- A text input field with the placeholder text "Selva Nancy".
- A text input field with the placeholder text "nancynadeson@gmail.com".
- A text input field with the placeholder text "46" and a small icon of a person.
- A password input field with a series of dots and a small icon of a key.

Below the input fields is a white button with the text "Register".

ii)Login Page



iii)Welcome Page



HTML Templates:

Registration Page:

```
<!DOCTYPE html>
<html>
  <head>
    <title>Registration Page</title>
    <meta charset="utf-8">
    <!-- Mobile Specific Metas -->
    <meta name="viewport" content="width=device-width, initial-scale=1, maximum-
scale=1">
    <!-- Font-->
    <link rel="stylesheet" href="static/montserrat-font.css">
    <link rel="stylesheet" href="static/material-design-iconic-font.min.css">
    <!-- Main Style Css -->
    <link rel="stylesheet" href="static/style.css">
  </head>
  <body class="form-v10">
    <div class="page-content">
      <div class="form-v10-content">
        <form class="form-detail" action="#" method="post" id="myform">
          <div class="login-form">
            <div class="form-right">
              <div class="form-rightn">
                <form>
                  <h1>Registration</h1>
                  <div class="content">

                      <div class="form-row form-row-2">
                        <input type="text" name="username" id="username" class="input-text"
placeholder="User Name" required>
                      </div>

                      <div class="form-row form-row-3">
                        <input type="email" name="email" class="email" id="email"
placeholder="Email" required>
                      </div>

                      <div class="form-row form-row-2">
                        <input type="number" name="rollno" id="rollno" class="input-text"
placeholder="Roll No" required>
                      </div>

                      <div class="form-row form-row-4">
                        <input type="password" name="password" class="password"
id="password" placeholder="password" required autocomplete="new-password">
                      </div>

                </div>
              </div>
            </div>
          </div>
        </form>
      </div>
    </div>
  </body>
</html>
```

```

        </div>
        <div class="form-row-lastn">
            <input type="button" name="register" class="register"
value="Register">
        </div>

    </form>
</div>
</div>
</form>
</div>
</div>
</body>
</html>

```

Login Page:

```

<!DOCTYPE html>
<html>
    <head>
        <title>login Page</title>
        <meta charset="utf-8">
        <!-- Mobile Specific Metas -->
        <meta name="viewport" content="width=device-width, initial-scale=1, maximum-
scale=1">
        <!-- Font-->
        <link rel="stylesheet" href="static/montserrat-font.css">
        <link rel="stylesheet" href="static/material-design-iconic-font.min.css">
        <!-- Main Style Css -->
        <link rel="stylesheet" href="static/style.css">
    </head>
    <body class="form-v10">
        <div class="page-content">
            <div class="form-v10-content">
                <form class="form-detail">
                    <div class="login-form">
                        <div class="form-right">
                            <div class="form-rightn">
                                <form action="/receivedata" method="post" id="myform">
                                    <h1>Login</h1>
                                    <div class="content">
                                        <div class="form-row form-row-3">
                                            <input type="email" name="email" class="email" id="email"
placeholder="Email" required>
                                        </div>
                                        <div class="form-row form-row-4">
                                            <input type="password" name="password" class="password"
id="password" placeholder="password" required autocomplete="new-password">
                                        </div>
                                        <a href="#" class="link">Forgot Your Password?</a>
                                    </div>
                                </form>
                            </div>
                        </div>
                    </div>
                </form>
            </div>
        </div>
    </body>
</html>

```



```

        </p1>
      </div>
      <div class="content">
        <p1>
        </p1>
      </div>

    </form>
  </div>
</div>
</form>
</div>
</div>
</body>
</html>

```

Static:

style.css:

```

body {
  margin: 0;
}
.button{
  padding-left: 0;
  text-align: center;
  margin: 44px 0 30px;}
.login-form {
  background: #fff;
  width: 500px;
  margin: 65px auto;
  display: -webkit-box;
  display: flex;
  -webkit-box-orient: vertical;
  -webkit-box-direction: normal;
  flex-direction: column;
  border-radius: 4px;
  box-shadow: 0 2px 25px rgba(0, 0, 0, 0.2);
  text-align: center;
}
.login-form h1 {
  padding: 35px 35px 0 35px;
  font-weight: 300;
  text-align: center;
  color: #fff;
}
.login-form .content {

```

```

padding: 35px;
text-align: center;
text-align: center;
}
.page-content {
width: 100%;
margin: 0 auto;
background: #75e2e9;
display: flex;
display: -webkit-flex;
justify-content: center;
-o-justify-content: center;
-ms-justify-content: center;
-moz-justify-content: center;
-webkit-justify-content: center;
align-items: center;
-o-align-items: center;
-ms-align-items: center;
-moz-align-items: center;
-webkit-align-items: center;
background-image: -moz-linear-gradient( 136deg, rgb(149,153,226) 0%, rgb(241, 170, 241
100%);
background-image: -webkit-linear-gradient( 136deg, rgb(149,153,226) 0%, rgb(241, 170,
241) 100%);
background-image: -ms-linear-gradient( 136deg, rgb(149,153,226) 0%, rgb(241, 170, 241)
100%);
}
.form-v10-content {
background: #fff;
width: 1100px;
border-radius: 10px;
-o-border-radius: 10px;
-ms-border-radius: 10px;
-moz-border-radius: 10px;
-webkit-border-radius: 10px;
box-shadow: 0px 8px 20px 0px rgba(0, 0, 0, 0.15);
-o-box-shadow: 0px 8px 20px 0px rgba(0, 0, 0, 0.15);
-ms-box-shadow: 0px 8px 20px 0px rgba(0, 0, 0, 0.15);
-moz-box-shadow: 0px 8px 20px 0px rgba(0, 0, 0, 0.15);
-webkit-box-shadow: 0px 8px 20px 0px rgba(0, 0, 0, 0.15);
margin: 95px 0;
position: relative;
font-family: 'Montserrat', sans-serif;
}
.form-v10-content .form-detail {
position: relative;
width: 100%;
display: flex;
display: -webkit-flex;
}
.form-v10-content .form-detail h2 {
font-weight: 500;
font-size: 25px;
margin-bottom: 34px;

```

```

padding: 33px 50px 0px 60px;
}
.form-v10-content .form-detail .form-left {
border-top-left-radius: 10px;
border-bottom-left-radius: 10px;
width: 100%;
}
.form-v10-content .form-detail .form-left h2 {
color: #e446bc;
}
.form-v10-content .form-detail .form-right {
width: 100%;
background: #e446bc;
border-top-right-radius: 10px;
border-bottom-right-radius: 10px;
}
.form-v10-content .form-detail .form-rightn {
width: 100%;
background: #e446bc;
border-top-right-radius: 10px;
border-bottom-right-radius: 10px;
border-top-left-radius: 10px;
border-bottom-left-radius: 10px;
align-items: center;
}
.form-v10-content .form-detail .form-right h2 {
color: #fff;
}
.form-v10-content .form-detail .form-group {
display: flex;
display: -webkit-flex;
}
.form-v10-content .form-detail .form-row {
position: relative;
margin-bottom: 24px;
padding-left: 60px;
padding-right: 50px;
}
.form-v10-content .form-detail .form-row {
position: relative;
margin-bottom: 24px;
padding-left: 60px;
padding-right: 50px;
}
.form-v10-content .form-detail .form-left .form-group .form-row.form-row-1 {
width: 50%;
padding: 0 12px 0 60px;
}
.form-v10-content .form-detail .form-left .form-group .form-row.form-row-2 {
width: 50%;
padding: 0 50px 0 12px;
}
.form-v10-content .form-detail .form-left .form-group .form-row.form-row-3 {
width: 73%;

```

```

padding: 0 12px 0 60px;
}
.form-v10-content .form-detail .form-left .form-group .form-row.form-row-4 {
width: 50%;
padding: 0 50px 0 12px;
}
.form-v10-content .form-detail .form-right .form-group .form-row.form-row-1 {
width: 50%;
padding: 0 12px 0 60px;
}
.form-v10-content .form-detail .form-right .form-group .form-row.form-row-2 {
width: 100%;
padding: 0 50px 0 12px;
}
.form-v10-content .form-detail select,
.form-v10-content .form-detail input {
width: 100%;
padding: 11.5px 15px 15px 15px;
border: 1px solid transparent;
background: transparent;
appearance: unset;
-moz-appearance: unset;
-webkit-appearance: unset;
-o-appearance: unset;
-ms-appearance: unset;
outline: none;
-moz-outline: none;
-webkit-outline: none;
-o-outline: none;
-ms-outline: none;
font-family: 'Montserrat', sans-serif;
font-size: 16px;
box-sizing: border-box;
-moz-box-sizing: border-box;
-webkit-box-sizing: border-box;
-o-box-sizing: border-box;
-ms-box-sizing: border-box;
}
.form-v10-content .form-detail select {
background: 0 0;
position: relative;
z-index: 9;
cursor: pointer;
}
.form-v10-content .form-detail .form-left select {
color: #666;
}
.form-v10-content .form-detail .form-right select {
color: rgb(255, 255, 255);
}
.form-v10-content .form-detail .select-btn {
z-index: 0;
position: absolute;
top: 30%;

```

```
    right: 11.5%;
    font-size: 18px;
}
.form-v10-content .form-detail .form-left .select-btn {
    color: #666;
}
.form-v10-content .form-detail .form-right .select-btn {
    color: #f2f2f2;
}
.form-v10-content .form-detail .form-group .form-row.form-row-4 .select-btn {
    top: 20%;
    right: 26%;
}
.form-v10-content .form-detail .form-right .form-group .form-row.form-row-2 .select-btn {
    top: 20%;
    right: 19%;
}
.form-v10-content .form-detail .form-left input {
    color: #000;
}
.form-v10-content .form-detail .form-right input {
    color: #fff;
}
.form-v10-content .form-detail .form-left input,
.form-v10-content .form-detail .form-left select {
    border-bottom: 1px solid #ccc;
}
.form-v10-content .form-detail .form-left input:focus,
.form-v10-content .form-detail .form-left select:focus {
    border-bottom: 1px solid #999;
}
.form-v10-content .form-detail .form-right input,
.form-v10-content .form-detail .form-right select {
    border-bottom: 1px solid;
    border-bottom-color: rgba(255, 255, 255, 0.3);
}
.form-v10-content .form-detail .form-right input:focus,
.form-v10-content .form-detail .form-right select:focus {
    border-bottom: 1px solid #ccc;
}
.form-v10-content .form-detail .form-right select option {
    background: #ccc;
}
.form-v10-content .form-detail .form-checkbox {
    margin-top: 37px;
    padding: 0 50px 0 60px;
    position: relative;
}
.form-v10-content .form-detail .form-checkbox input {
    position: absolute;
    opacity: 0;
}
.form-v10-content .form-detail .form-checkbox .checkmark {
    position: absolute;
```

```

    top: 1px;
    left: 60px;
    height: 15px;
    width: 15px;
    border: 1px solid #e5e5e5;
    cursor: pointer;
}

.form-v10-content .form-detail .form-checkbox .checkmark::after {
    content: "";
    position: absolute;
    left: 5px;
    top: 1px;
    width: 3px;
    height: 8px;
    border: 1px solid #fff;
    border-width: 0 2px 2px 0;
    -webkit-transform: rotate(45deg);
    -ms-transform: rotate(45deg);
    -o-transform: rotate(45deg);
    -moz-transform: rotate(45deg);
    transform: rotate(45deg);
    display: none;
}

.form-v10-content .form-detail .form-checkbox input:checked ~ .checkmark::after {
    display: block;
}

.form-v10-content .form-detail .form-checkbox p {
    margin-left: 34px;
    color: #e5e5e5;
    font-size: 14px;
    font-weight: 400;
}

.form-v10-content .form-detail .form-checkbox .text {
    font-weight: 400;
    color: #fff;
    text-decoration: underline;
}

.form-v10-content .form-detail .form-right .form-row-last {
    padding-left: 60px;
    margin: 44px 0 10px;
}

.form-v10-content .form-detail .form-right .form-row-lastn {
    align-items: center;
}

.form-v10-content .form-detail .form-right .register {
    background: #fff;
    border-radius: 25px;
    -o-border-radius: 25px;
    -ms-border-radius: 25px;
    -moz-border-radius: 25px;
    -webkit-border-radius: 25px;
    box-shadow: 0px 6px 17px 0px rgba(0, 0, 0, 0.15);
    -o-box-shadow: 0px 6px 17px 0px rgba(0, 0, 0, 0.15);
    -ms-box-shadow: 0px 6px 17px 0px rgba(0, 0, 0, 0.15);
}

```

```

-moz-box-shadow: 0px 6px 17px 0px rgba(0, 0, 0, 0.15);
-webkit-box-shadow: 0px 6px 17px 0px rgba(0, 0, 0, 0.15);
width: 180px;
border: none;
margin: 6px 0 50px 0px;
cursor: pointer;
color: #333;
font-weight: 700;
font-size: 15px;
}
.form-v10-content .form-detail .form-right .register:hover {
    background: #ccc;
}
.form-v10-content .form-detail .form-right .form-row-last input {
    padding: 12.5px;
}
.form-v10-content .form-detail .form-right .form-row-lastn input {align-items: center;
}
.form-v10-content .form-detail .form-left input::-webkit-input-placeholder { /*
Chrome/Opera/Safari */
    color: #666;
    font-size: 16px;
}
.form-v10-content .form-detail .form-left input::-moz-placeholder { /* Firefox 19+ */
    color: #666;
    font-size: 16px;
}
.form-v10-content .form-detail .form-left input:-ms-input-placeholder { /* IE 10+ */
    color: #666;
    font-size: 16px;
}
.form-v10-content .form-detail .form-left input:-moz-placeholder { /* Firefox 18- */
    color: #666;
    font-size: 16px;
}
.form-v10-content .form-detail .form-right input::-webkit-input-placeholder { /*
Chrome/Opera/Safari */
    color: #f2f2f2;
    font-size: 16px;
}
.form-v10-content .form-detail .form-right input::-moz-placeholder { /* Firefox 19+ */
    color: #f2f2f2;
    font-size: 16px;
}
.form-v10-content .form-detail .form-right input:-ms-input-placeholder { /* IE 10+ */
    color: #f2f2f2;
    font-size: 16px;
}
.form-v10-content .form-detail .form-right input:-moz-placeholder { /* Firefox 18- */
    color: #f2f2f2;
    font-size: 16px;
}

/* Responsive */

```

```

@media screen and (max-width: 1199px) {
    .form-v10-content {
        margin: 95px 20px;
    }
}

@media screen and (max-width: 991px) and (min-width: 768px) {
    .form-v10-content .form-detail .form-group {
        flex-direction: column;
        -o-flex-direction: column;
        -ms-flex-direction: column;
        -moz-flex-direction: column;
        -webkit-flex-direction: column;
    }

    .form-v10-content .form-detail .form-left .form-group .form-row.form-row-1,
    .form-v10-content .form-detail .form-left .form-group .form-row.form-row-2,
    .form-v10-content .form-detail .form-left .form-group .form-row.form-row-3,
    .form-v10-content .form-detail .form-left .form-group .form-row.form-row-4,
    .form-v10-content .form-detail .form-right .form-group .form-row.form-row-1,
    .form-v10-content .form-detail .form-right .form-group .form-row.form-row-2 {
        width: auto;
        padding: 0 50px 0 60px;
    }

    .form-v10-content .form-detail .select-btn,
    .form-v10-content .form-detail .form-left .form-group .form-row.form-row-4 .select-btn,
    .form-v10-content .form-detail .form-right .form-group .form-row.form-row-2 .select-
btn {
        right: 15%;
    }
}

@media screen and (max-width: 767px) {
    .form-v10-content .form-detail {
        flex-direction: column;
        -o-flex-direction: column;
        -ms-flex-direction: column;
        -moz-flex-direction: column;
        -webkit-flex-direction: column;
    }

    .form-v10-content .form-detail .form-right {
        border-top-right-radius: 0px;
        border-bottom-left-radius: 10px;
    }

    .form-v10-content .form-detail .form-left {
        padding-bottom: 50px;
    }
}

@media screen and (max-width: 575px) {
    .form-v10-content .form-detail .form-group {
        flex-direction: column;
        -o-flex-direction: column;
        -ms-flex-direction: column;
        -moz-flex-direction: column;
        -webkit-flex-direction: column;
    }
}

```



```

.form-v10-content .form-detail .form-row,
.form-v10-content .form-detail .form-left .form-group .form-row.form-row-1,
.form-v10-content .form-detail .form-left .form-group .form-row.form-row-2,
.form-v10-content .form-detail .form-left .form-group .form-row.form-row-3,
.form-v10-content .form-detail .form-left .form-group .form-row.form-row-4,
.form-v10-content .form-detail .form-right .form-group .form-row.form-row-1,
.form-v10-content .form-detail .form-right .form-group .form-row.form-row-2 {
    width: auto;
    padding: 0 30px;
}
.form-v10-content .form-detail .select-btn,
.form-v10-content .form-detail .form-left .form-group .form-row.form-row-4 .select-btn,
.form-v10-content .form-detail .form-right .form-group .form-row.form-row-2 .select-
btn {
    right: 15%;
}
.form-v10-content .form-detail h2 {
    padding: 33px 30px 0px 30px;
}
.form-v10-content .form-detail .form-checkbox {
    padding: 0 30px;
}
.form-v10-content .form-detail .form-checkbox .checkmark {
    left: 30px;
}
.form-v10-content .form-detail .form-right .form-row-last {
    padding-left: 0;
    text-align: center;
}
.form-v10-content .form-detail .form-right .form-row-lastn {
    padding-left: 0;
    text-align: relative;
}
}

```

app.py:

```

from flask import Flask,render_template,request
from mydb import connect
app=Flask(__name__)

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

@app.route("/receivedata",method=['POST'])
def result():

```

```
    email=request.form['email']
    password=request.form['password']
    connect.insert_values(email,password)
    return "welcome back {}".format(username)

@app.route("/reg")
def reg():
    return render_template('Registration.html')

@app.route("/welcome")
def welcome():
    return render_template('Welcome.html')

if __name__=="__main__":
    app.run(debug=True)
```