Assignment -2
IBM CLOUD DB2

Assignment Date	29 September 2022
Student Name	NAGARAJ.P
Student Roll Number	911719104037
Maximum Marks	2 Marks

Questions:

- Create a Flask App

```python
import email
from turtle import st
from flask import Flask, render_template, request, redirect, url_for, session
from markupsafe import escape

import ibm_db
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=19af6446-6171-4641-8aba-
9dcff8e1b6ff.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=30699;SECURITY=S
SL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=lcr86196;PWD=K1KuSfq9rUF9R3C
2",'','')

app = Flask(__name__)


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

@app.route('/addstudent')
def new_student():
  return render_template('add_student.html')

@app.route('/login')
def login_student():
  return render_template('login.html')

@app.route('/addrec',methods = ['POST', 'GET'])
def addrec():
  if request.method == 'POST':

    email = request.form['email']
```

```python
    username = request.form['username']
    rollnumber = request.form['rollnumber']
    password = request.form['password']
    insert_sql = "INSERT INTO students 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, rollnumber)
    ibm_db.bind_param(prep_stmt, 4, password)
    ibm_db.execute(prep_stmt)

    return render_template('signupcomplete.html', msg="Student Data saved
successfuly..")


@app.route('/checklogin',methods=['POST'])
def checklogin():
  if request.method=='POST':

    email = request.form['email']
    password = request.form['password']

    sql = "SELECT * FROM students WHERE email =? and password=?"
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt,1,email)
    ibm_db.bind_param(stmt,2,password)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)
    print(account)
    if account:
      return list()

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


@app.route('/list')
def list():
  students = []
  sql = "SELECT * FROM Students"
  stmt = ibm_db.exec_immediate(conn, sql)
  dictionary = ibm_db.fetch_both(stmt)
  while dictionary != False:
    # print ("The Name is : ",  dictionary)
```
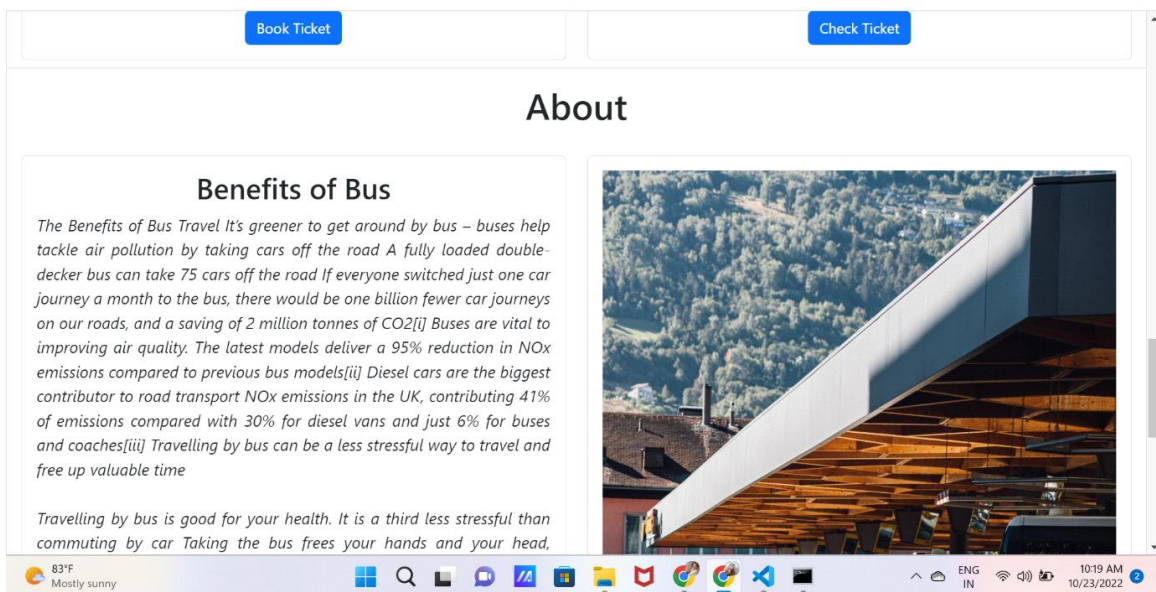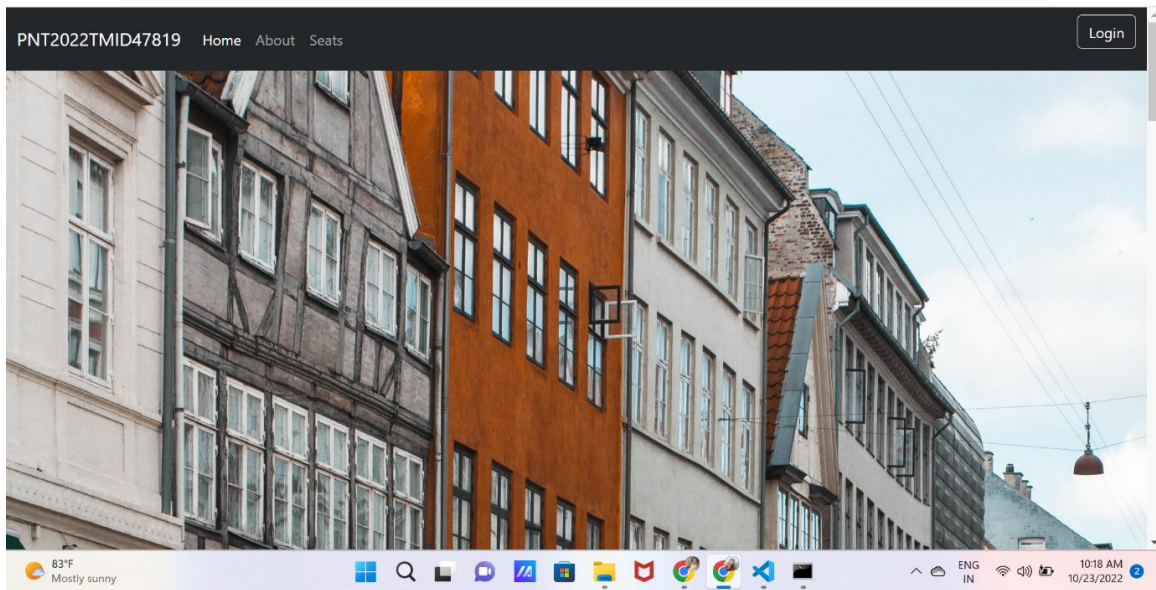
```
    students.append(dictionary)
    dictionary = ibm_db.fetch_both(stmt)

    if students:
        return render_template("list.html", students = students)
```

2.) Add the Home page, About Page

3.) Add the Bootstrap

```html
<!-- CSS only -->
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeuOxjzrPF/et3URy9Bv1WTRi"
crossorigin="anonymous">

<!-- JavaScript Bundle with Popper -->
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/js/bootstrap.bundle.min.js
" integrity="sha384-
OERcA2EqjJCMA+/3y+gxIOqMEjwtxJY7qPCqsdltbNJuaOe923+mo//f6V8Qbsw3"
crossorigin="anonymous"></script>

<nav class="navbar navbar-expand-lg navbar-dark bg-dark">
  <div class="container-fluid">
    <a href="#" class="navbar-brand">PNT2022TMID47819</a>
    <button type="button" class="navbar-toggler" data-bs-toggle="collapse"
data-bs-target="#navbarCollapse1">
      <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="navbarCollapse1">
      <div class="navbar-nav">
        <a href="/" class="nav-item nav-link active">Home</a>
        <a href="#about" class="nav-item nav-link">About</a>
        <a href="#seats" class="nav-item nav-link">Seats</a>
      </div>
      <form class="d-flex ms-auto" action="/login">
        <button type="submit" class="btn btn-outline-light">Login</button>
      </form>
```

```html
            </div>
        </div>
</nav>


<div id="carouselExampleSlidesOnly" class="carousel slide" data-ride="carousel">
    <div class="carousel-inner">
      <div class="carousel-item active">
          <img src="{{url_for('static', filename='img/arya.jpg')}}" class="d-block w-100">
      </div>
      <div class="carousel-item">
          <img src="{{url_for('static', filename='img/arya2.jpg')}}" class="d-block w-50">
      </div>
      <div class="carousel-item">
          <img src="{{url_for('static', filename='img/arya3.jpg')}}" class="d-block w-50">
      </div>
    </div>
  </div>

<div class="card text-center" id="seats">
    <div class="card-header">
        <h1>SEATS AVILABILITY</h1><br>
        <div class="row">
            <div class="col-sm-6">
                <div class="card">
                    <div class="card-body">
                        <h5 class="card-title">Seats Book</h5>
                        <p class="card-text">
                            A package will always include reserved or general admission tickets to the event, and may include one or some of the following: Meet and greet with the artist. A photo with the artist. Exclusive access to a private pre-show soundcheck. Exclusive access to a backstage tour.
                        </p>
                        <a href="#" class="btn btn-primary">Book Ticket</a>
                    </div>
                </div>
            </div>
            <div class="col-sm-6">
                <div class="card">
                    <div class="card-body">
```

```html
        <h5 class="card-title">Seats Check</h5>
          <p class="card-text">NON-AC Seater is one kind of bus type that
is more convenient for the Traveler when they are doing long journeys. NON-AC
Seater available in both A/C as well as Non-A/C Bus Types. NON-AC Seater buses
have the facilities like Push-Back & Water Bottle Holdings, etc.</p>
          <a href="#" class="btn btn-primary">Check Ticket</a>
        </div>
      </div>
    </div>
  </div>
  <div class="card-body" id="about">
    <h1>About</h1><br>
    <div class="row">
      <div class="col-sm-6">
        <div class="card">
          <div class="card-body">
            <h2 class="card-title">Benefits of Bus</h2>
            <p class="card-text" style="text-align:justify;font-size:
18px;font-style: italic;">
              The Benefits of Bus Travel
              It's greener to get around by bus – buses help tackle air
pollution by taking cars off the road

              A fully loaded double-decker bus can take 75 cars off the road
              If everyone switched just one car journey a month to the bus,
there would be one billion fewer car journeys on our roads, and a saving of 2
million tonnes of CO2[i]
              Buses are vital to improving air quality. The latest models
deliver a 95% reduction in NOx emissions compared to previous bus models[ii]
              Diesel cars are the biggest contributor to road transport NOx
emissions in the UK, contributing 41% of emissions compared with 30% for diesel
vans and just 6% for buses and coaches[iii]
               Travelling by bus can be a less stressful way to travel and free
up valuable time
              <br>
              <br>

              Travelling by bus is good for your health. It is a third less
stressful than commuting by car
              Taking the bus frees your hands and your head, allowing you to
catch up on life admin, read a book or play games on your mobile.
              Walking to the bus stop can, on average, help you achieve half
the Government's recommended 30 minutes of exercise per day
```

A third of drivers consider driving a chore because of high fuel costs and increased congestion.

```html
<br>
<br>
```
The bus is good value for everyone
Bus commuters help tackle congestion, which costs the UK economy at £11 billion each year
Bus commuters generate £64 billion of benefits to the UK economy
Tackling loneliness & other social benefits
```html
<br>
<br>
```
A third (33 per cent) of Britons admit that they deliberately catch the bus to have some human contact[iv]
Young people are more reliant on the bus than any other group – more than 50% of 16-19 year olds use the bus regularly[v]
Jobseekers are heavily dependent on the bus, with 77% having no regular access to a car, van or motorcycle, rising to 87% among 16-24 year olds[vi]
Buses are crucial to family life. 41% of passengers said they believed they would spend less time with family without access to the bus[vii]
Buses help local communities to thrive by keeping local people connecting and strengthening community ties.
```html
<br>
</p>
</div>
</div>
</div>
<div class="col-sm-6">
<div class="card">
<div class="card-body">
<img src="{{url_for('static', filename='img/arya3.jpg')}}" class="d-block w-100 h-200">
</div>
</div>
</div>
</div>
</div>
<div class="card-footer text-muted">
2 days ago
</div>
</div>
```

4.) Add the Sign in page and App the Signup Page + database connectivity

Sign Up

Please fill in this form to create an account.

Email

Enter Email

Username

admin@gmail.com

RollNumber

•••••

Password

Enter Password

☑ Remember me

By creating an account you agree to our Terms & Privacy.

Your Account Has Been Created Successfully

Go to Sign in Page

List of Students ....

Email	Username	Roll Number	Password
rameshkannan000078@gmail.com	admin	6776567565	adadssdaasdads
	admin		adadssdaasdads
admin@gmail.com	admin	911719104054	admin
ram@gmail.com	ram	7835	divyaread
admin@gmail.com	admin	2443	admin
admin@gmail.com	admin	2443	admin
admin@gmail.com	admin	2443	admin
admin@gmail.com	admin	2443	admin
admin@gmail.com	admin	2443	admin
admin@gmail.com	admin	2443	admin
admin@gmail.com	admin	2443	admin
admin@gmail.com	admin	2443	admin

IBM Cloud

Search resources and products...

Catalog   Manage   Ramesh kannan's Acco...

Resource list /

Db2-pw   Active   Add tags

Details   Actions...

Manage
Getting started
Service credentials
Connections

Service credentials

You can generate a new set of credentials for cases where you want to manually connect an app or external consumer to an IBM Cloud service. Learn more

Search credentials...   New credential +

Key name	Date created
Service credentials-1	2022-09-23 5:38 AM

IBM **Db2 on Cloud**

Data objects   My script

Filter objects

LCR86196
  Tables
    STUDENTS
  Views
  MQTs
  Aliases
  Nicknames

* Untitled - 1   +

Syntax assistant   Run all

```
1  Select * from students;
```

History

Beta   Classic

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>ACCOUNT</title>

<link href="{{url_for('static',
filename='css/assets/dist/css/bootstrap.min.css')}}"  rel="stylesheet">
    <style>
        .center {
display: flex;
justify-content: center;
}
    </style>
</head>
<body>
    <div class="center">
        <H1>Your Account Has Been Created Successfully</H1>

        <br>
        <BR>
```
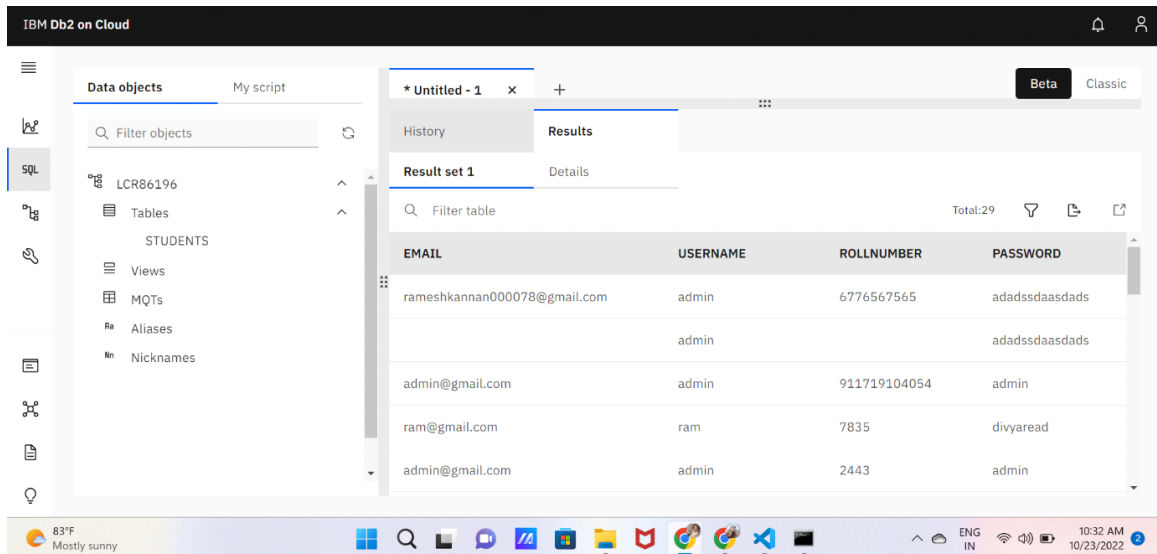
```html
            <img src="https://ms-
researchhub.com/____impro/1/onewebmedia/payment_successful.gif?etag=W%2F%2230e24-
5cfa202d%22&sourceContentType=image%2Fgif&ignoreAspectRatio&resize=300%2B255&extr
act=0%2B20%2B285%2B234">

        </div>
        <br>
        <div class="center">
            <form action ="/login">
                <button class="w-40 btn btn-lg btn-danger" type="submit">Go to Sign
in Page</button>
            </form>

        </div>

</body>
</html>




<!DOCTYPE html>
<html>
<style>
body {font-family: Arial, Helvetica, sans-serif;}
* {box-sizing: border-box}

/* Full-width input fields */
input[type=text], input[type=password] {
  width: 100%;
  padding: 15px;
  margin: 5px 0 22px 0;
  display: inline-block;
  border: none;
  background: #f1f1f1;
}

input[type=text]:focus, input[type=password]:focus {
  background-color: #ddd;
  outline: none;
}

hr {
  border: 1px solid #f1f1f1;
  margin-bottom: 25px;
}
```

```css
/* Set a style for all buttons */
button {
  background-color: #04AA6D;
  color: white;
  padding: 14px 20px;
  margin: 8px 0;
  border: none;
  cursor: pointer;
  width: 100%;
  opacity: 0.9;
}

button:hover {
  opacity:1;
}

/* Extra styles for the cancel button */
.cancelbtn {
  padding: 14px 20px;
  background-color: #f44336;
}

/* Float cancel and signup buttons and add an equal width */
.cancelbtn, .signupbtn {
  float: left;
  width: 50%;
}

/* Add padding to container elements */
.container {
  padding: 16px;
}

/* Clear floats */
.clearfix::after {
  content: "";
  clear: both;
  display: table;
}

/* Change styles for cancel button and signup button on extra small screens */
@media screen and (max-width: 300px) {
  .cancelbtn, .signupbtn {
```

```html
      width: 100%;
    }
}
</style>
<body>

<form action = "{{ url_for('addrec') }}" method = "POST" style="border:1px solid
#ccc">
  <div class="container">
    <h1>Sign Up</h1>
    <p>Please fill in this form to create an account.</p>
    <hr>

    <label for="email"><b>Email</b></label>
    <input type="text" placeholder="Enter Email" name="email" required>


    <label for="Username"><b>Username</b></label>
    <input type="text" name="username" placeholder="Enter Username" required
/><br>

    <label for="psw"><b>RollNumber</b></label>
    <input type="password" placeholder="Enter RollNumber" name="rollnumber"
required>

    <label for="psw"><b>Password</b></label>
    <input type="password" placeholder="Enter Password" name="password" required>

    <label>
      <input type="checkbox" checked="checked" name="remember" style="margin-
bottom:15px"> Remember me
    </label>

    <p>By creating an account you agree to our <a href="#"
style="color:dodgerblue">Terms & Privacy</a>.</p>

    <div class="clearfix">
      <button type="button" class="cancelbtn">Cancel</button>
      <button type="submit" class="signupbtn">Sign Up</button>
    </div>
  </div>
</form>

</body>
```

```html
</html>
```