Assignment -2
IBM CLOUD DB2

Assignment Date	12 october 2022
Student Name	Y.Karthikeyan
Student Roll Number	911719104021
Maximum Marks	2 Marks

Questions:

1. 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;SECURIT
Y=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=lcr86196;PWD=K1KuSfq9r
UF9R3C2",'','')
 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']      username =
request.form['username']     rollnumber =
request.form['rollnumber']     password =
request.form['password']     insert_sql = "INSERT INTO
students VALUES (?,?,?,?)"
```
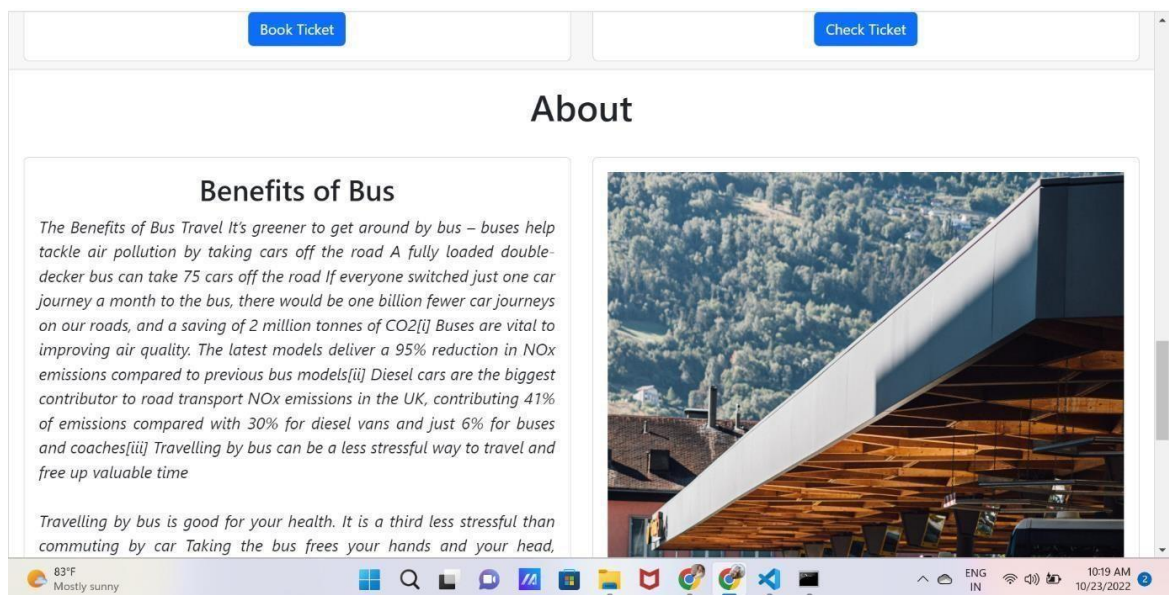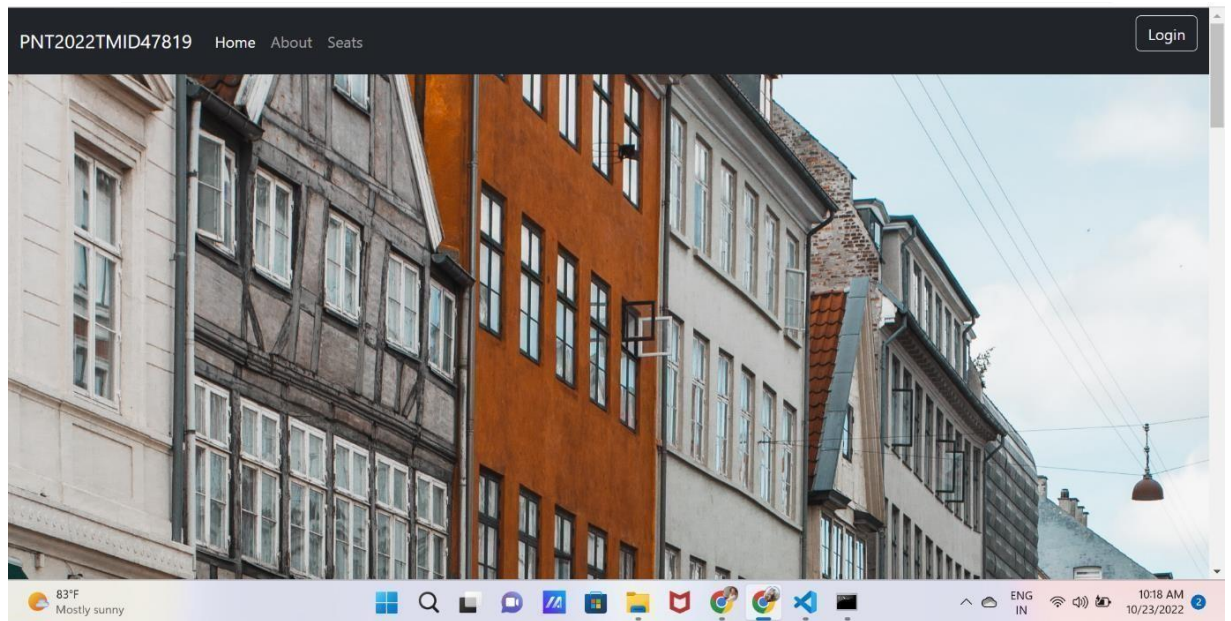
```python
    prep_stmt = ibm_db.prepare(conn, insert_sql)
ibm_db.bind_param(prep_stmt, 1, email)        ibm_db.bind_param(prep_stmt, 2,
username)       ibm_db.bind_param(prep_stmt, 3, rollnumber)
ibm_db.bind_param(prep_stmt, 4, password)        ibm_db.execute(prep_stmt)
        return render_template('signupcomplete.html', 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

About

Benefits of Bus

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 CO_2[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

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,

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-
outlinelight">Login</button>
          </form>
      </div>
  </div>
</nav>

<div id="carouselExampleSlidesOnly" class="carousel slide"
dataride="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">
```

```html
    <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">
                <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>
    <div class="card-body" id="about">
      <h1>About</h1><br>
      <div class="row">
        <div class="col-sm-6">
          <div class="card">
```

```html
<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.
    `<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
    `<br>`
    `<br>`
A third (33 per cent) of Britons admit that they deliberately catch the bus to have some human contact[iv]
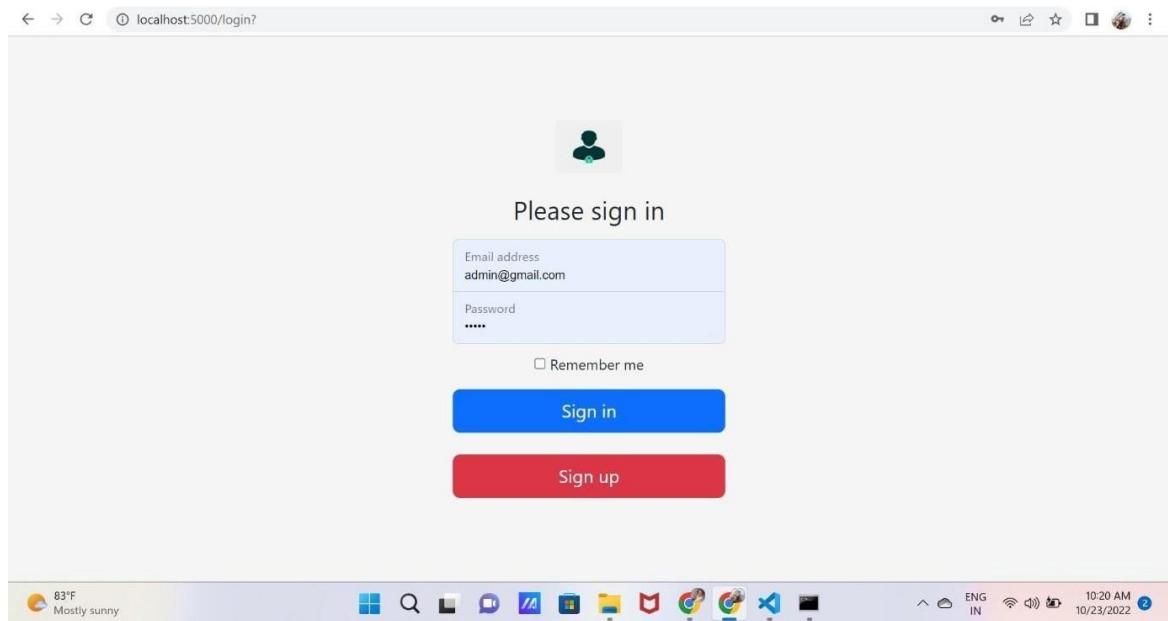Young people are more reliant on the bus than any other group – more than 50% of 16-19 year olds use the bus regularly[v]
Jobseekers are heavily dependent on the bus, with 77% having no regular access to a car, van or motorcycle, rising to 87% among 16-24 year olds[vi]

```
              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.
              <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

Q 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   * Untitled - 1 ×   +   Beta   Classic

Q Filter objects   ↻

LCR86196   ∧
  Tables   ∧
    STUDENTS
  Views
  MQTs
  Aliases
  Nicknames

                    Syntax assistant   Run all   ⌄

1 Select * from students;

History

```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>
        <img
src="https://msresearchhub.com/___impro/1/onewebmedia/payment_successful.gif?eta
g=W%2F%2230e
24-
5cfa202d%22&sourceContentType=image%2Fgif&ignoreAspectRatio&resize=300%2B255&e
xtract=0%2B20%2B285%2B234">
```
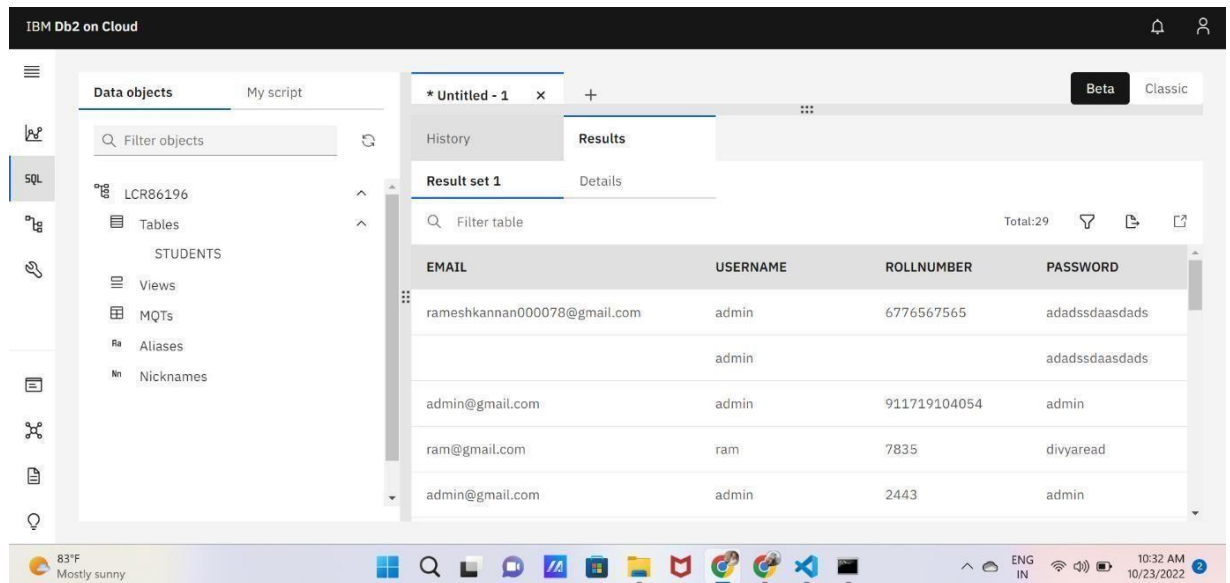
```html
    </div>
    <br>
    <div class="center">
        <form action ="/login">
            <button class="w-40 btn btn-lg btn-danger" type="submit">Go to
Sign in Page</button>
        </form>

    </div>

</body>
</html>
```

```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;
}

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

```css
  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 {
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>
```

```html
    <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="marginbottom: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>
```