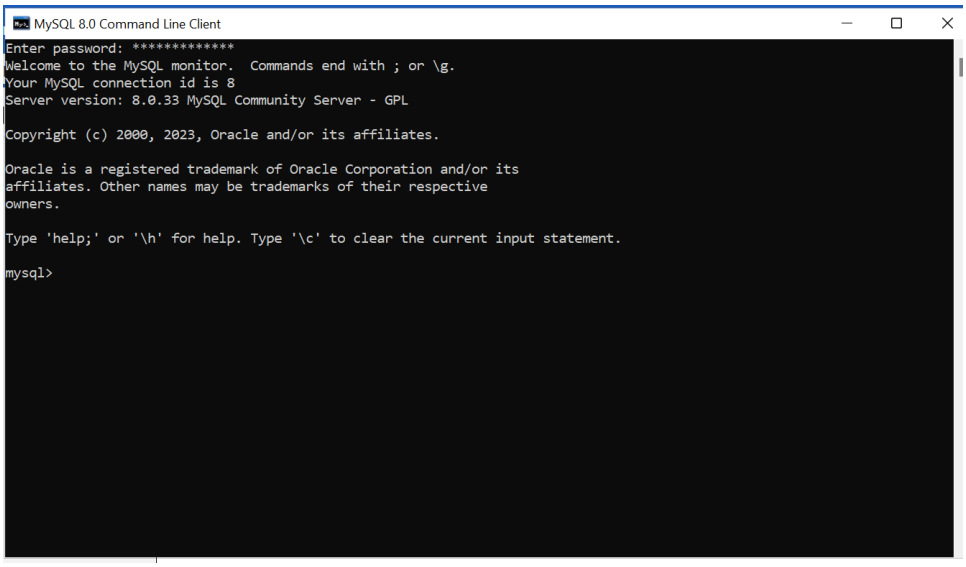
Please follow the steps below to replicate my tutorial for Windows. For Linux, please refer to the video recording.

1) Install environment
    a. Go to MySQL :: Download MySQL Installer and download and install MySQL.
    b. Once installed, open MySQL command line client.



    c. Create a database.

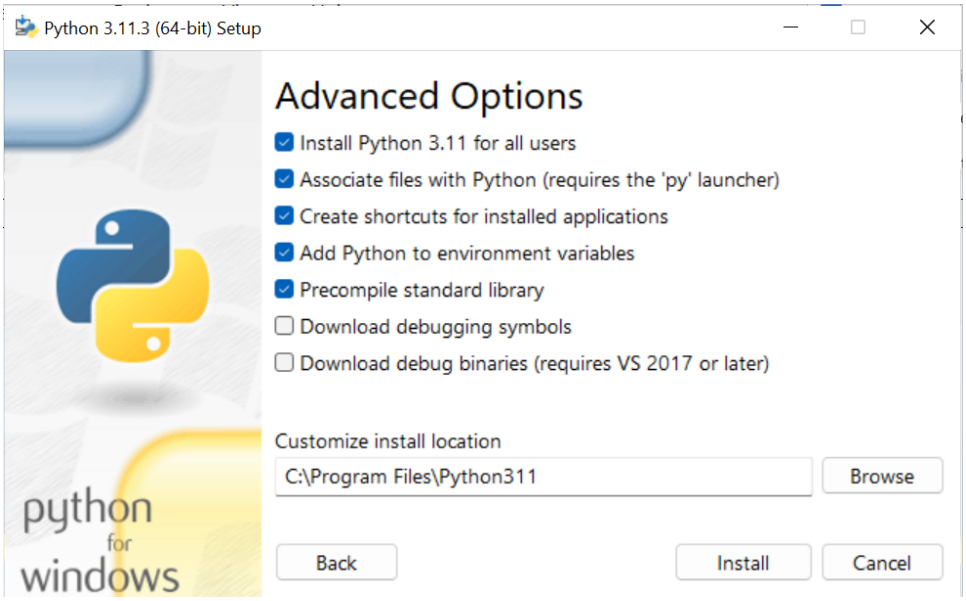
```
mysql> create database sitedb;
Query OK, 1 row affected (0.01 sec)
```

    d. Create a table.

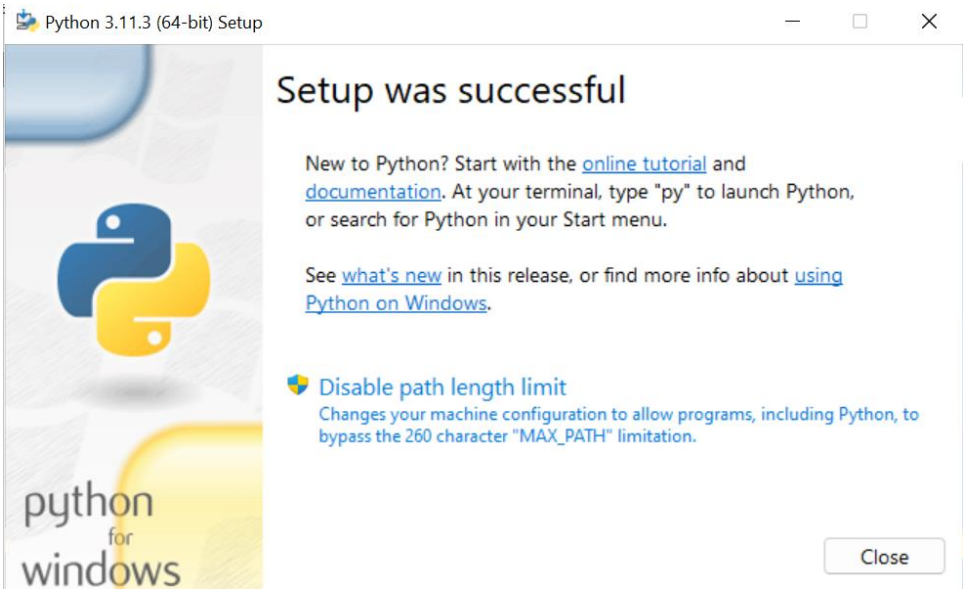
```
mysql> use sitedb
Database changed
mysql> CREATE TABLE users (
    ->     uname VARCHAR(256),
    ->     upass VARCHAR(256),
    ->     usecret VARCHAR(256)
    ->   );
Query OK, 0 rows affected (0.05 sec)
```

    e. Let's proceed to the python program to build our web app.
2) Download and install python from Download Python | Python.org
    a. Install Python. Ensure you add Python to the Path variable and customize installation as per the screenshot below.

b. Install Python for all users as per the screenshot below

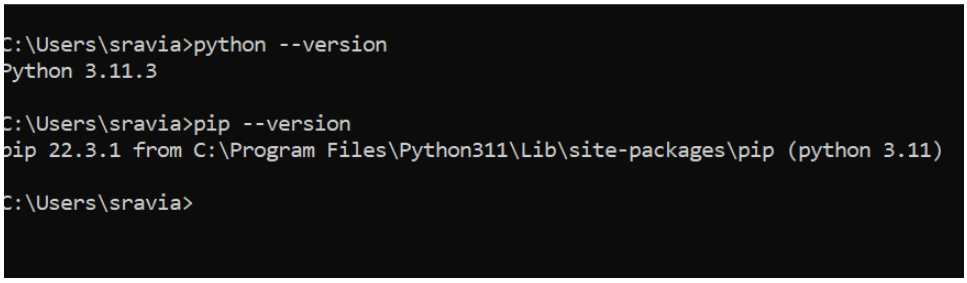


c. Disable path length limit as per the screenshot below

d. 

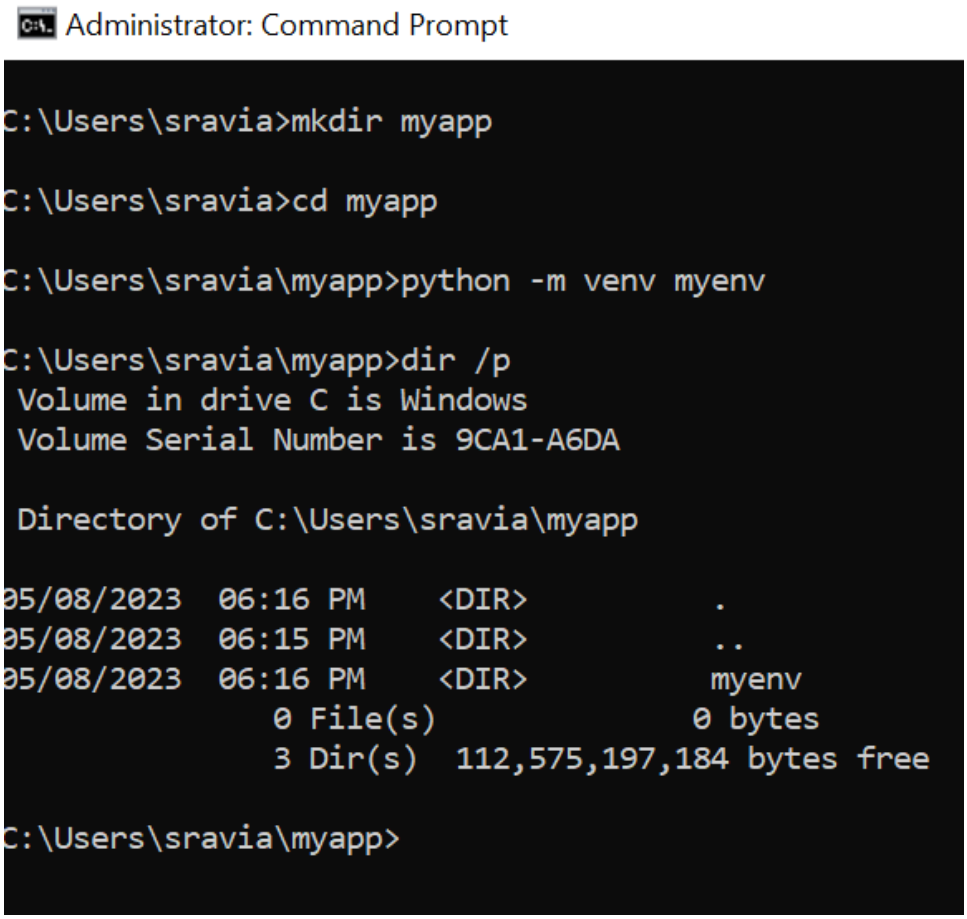
3) Open command prompt (cmd.exe) and check that Python has successfully installed

a.



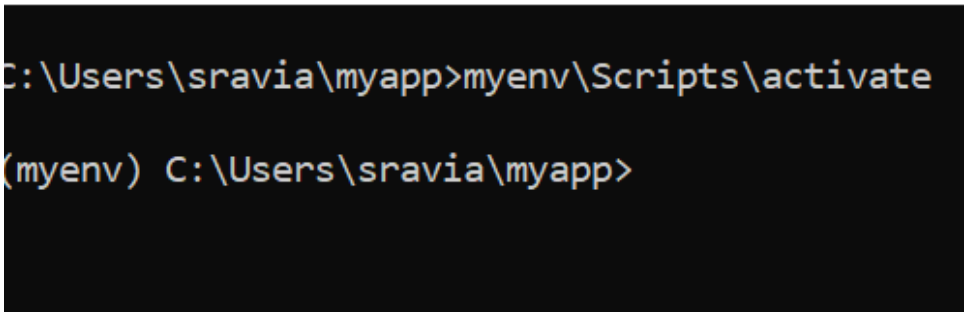
4) Now let's ensure we have a virtual environment where we only install the modules we need.

a.



b. Activate the virtual environment you just created

c.

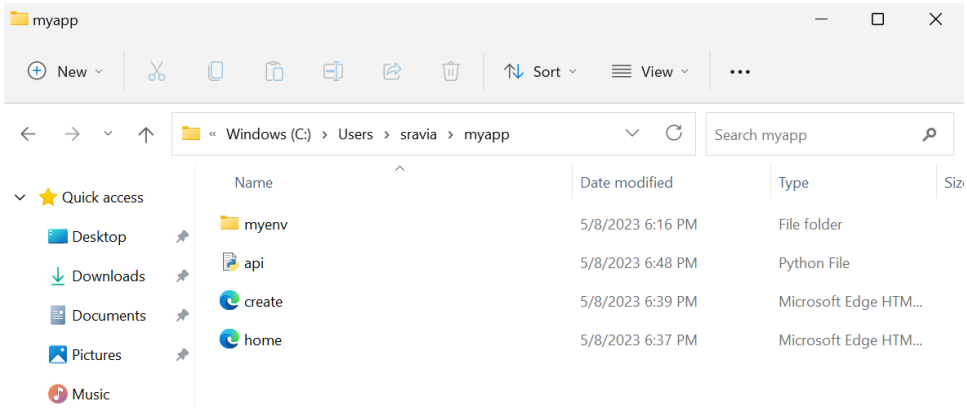


d. Do you observe a (myenv) before the command prompt? That shows our virtual environment has started.

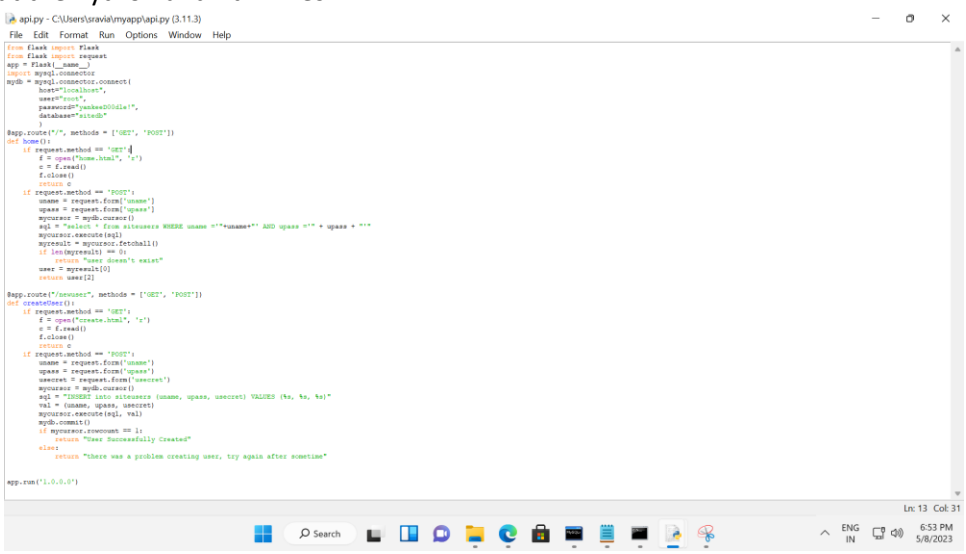
5) Now we will install the modules we need.

a.
```
(myenv) C:\Users\sravia\myapp>pip install flask
Collecting flask
  Downloading Flask-2.3.2-py3-none-any.whl (96 kB)
     ---------------------------------------- 96.9/96.9 kB 5.4 MB/s eta 0:00:00
```
b.
```
(myenv) C:\Users\sravia\myapp>python -m pip install mysql-connector-python
Collecting mysql-connector-python
  Downloading mysql_connector_python-8.0.33-cp311-cp311-win_amd64.whl (9.6 MB)
```
c. We need flask to build a web server and mysql-connector-python to connect to our database.

6) Install git and GitHub.
7) Now 'git clone' my project from https://github.com/sravia-qa/QA-Assignment.git and copy paste the html files into your myapp folder. AFter copy-pasting your screen should look like this.

a.


8) Checkout the Python and html files

a.


b.

```
(myenv) C:\Users\sravia\myapp>more home.html
<html>
       <head>
              <title> SQL Injection </title>
       </head>
       <body>
              <div>
                     <form action="/" method="post">
                     <p> Please enter your username and password to create user </p>
                     <br/>
                      <input name="uname" type = "text" placeholder="Enter your username" id="tb1" />
                      <br/>
                      <input name="upass" type = "password" placeholder="Enter a password" id="tb2" />
                      <br/>
                      <button id="btn1">Login</button>
                     </form>
              </div>
       </body>
</html>

(myenv) C:\Users\sravia\myapp>
```

c.

```
(myenv) C:\Users\sravia\myapp>more create.html
<html>
       <head>
              <title> New User </title>
       </head>
       <body>
              <div>
                     <form action="/newuser" method="POST">
                            Enter a username <br/>
                            <input type="text" name="uname" placeholder="Enter a username" />
                            <br/><br/>
                            <input type="password" name="upass" placeholder="Enter a new password and don't forget"
/>
                            <br/><br/>
                            <input type="textarea" name="usecret" placeholder="Enter some secret message" />
                            <button> Create New User </button>
                     </form>
              </div>
       </body>
</html>

(myenv) C:\Users\sravia\myapp>
```

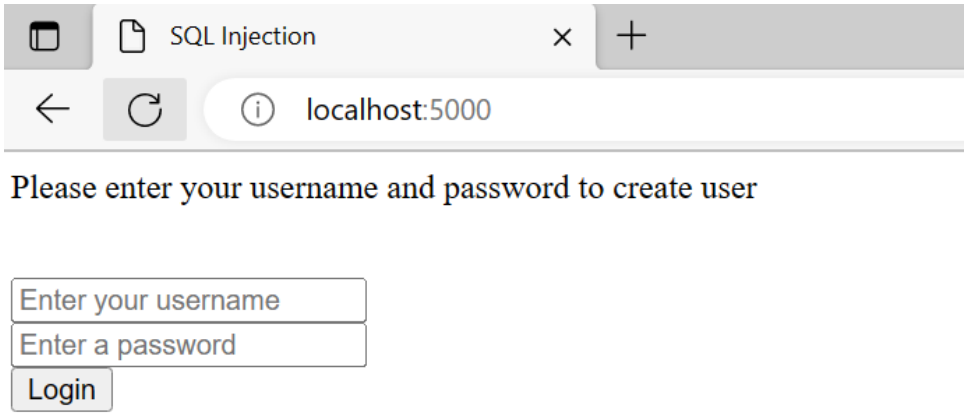
d.

```
(myenv) C:\Users\sravia\myapp>more api.py
from flask import Flask
from flask import request
app = Flask(__name__)
import mysql.connector
mydb = mysql.connector.connect(
        host="localhost",
        user="root",
        password="yankeeD00dle!",
        database="sitedb"
        )
@app.route("/", methods = ['GET', 'POST'])
def home():
    if request.method == 'GET':
        f = open("home.html", 'r')
        c = f.read()
        f.close()
        return c
    if request.method == 'POST':
        uname = request.form['uname']
        upass = request.form['upass']
        mycursor = mydb.cursor()
        sql = "select * from siteusers WHERE uname ='"+uname+"' AND upass ='" + upass + "'"
        mycursor.execute(sql)
        myresult = mycursor.fetchall()
        if len(myresult) == 0:
            return "user doesn't exist"
        user = myresult[0]
```

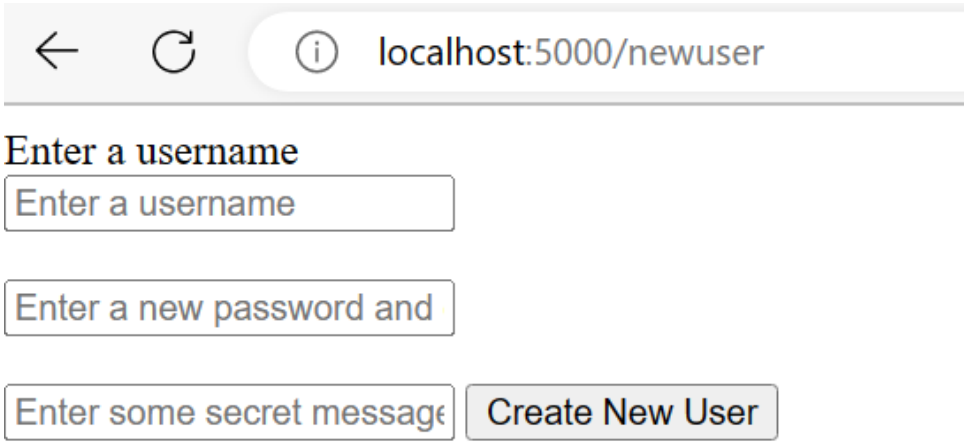
9) Now, let’s try running the app.

a. 

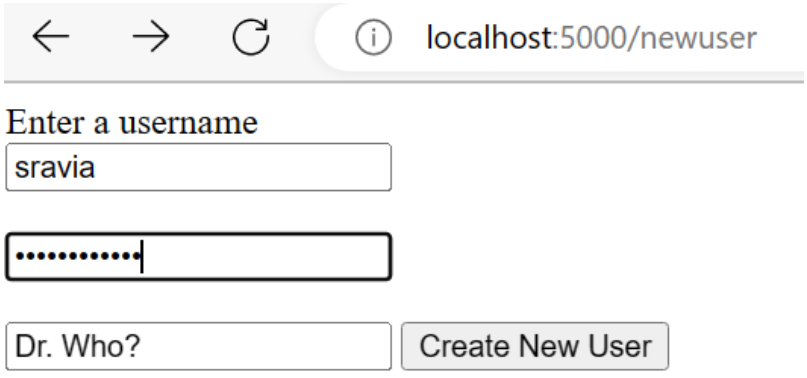
b. Open a new web browser and navigate to localhost:5000



i. And also to the following URL:



ii. Create a new user as per below screenshot



1.

And you are now all set! Congratulations on your starter kit! Build on top of this your own business app!