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Command Prompt
C:\Users\ELCOT\Documents\flask_app>py -m venv env
C:\Users\ELCOT\Documents\flask_app>env\Scripts\activate
(env) C:\Users\ELCOT\Documents\flask_app>pip install flask
Collecting flask
  Using cached Flask-2.2.2-py3-none-any.whl (101 kB)
Collecting Werkzeug>=2.2.2
  Using cached Werkzeug-2.2.2-py3-none-any.whl (232 kB)
Collecting itsdangerous>=2.0
  Using cached itsdangerous-2.1.2-py3-none-any.whl (15 kB)
Collecting click>=8.0
  Using cached click-8.1.3-py3-none-any.whl (96 kB)
Collecting importlib-metadata>=3.6.0; python_version < "3.10"
  Using cached importlib_metadata-5.0.0-py3-none-any.whl (21 kB)
Collecting Jinja2>=3.0
  Using cached Jinja2-3.1.2-py3-none-any.whl (133 kB)
Collecting MarkupSafe>=2.1.1
  Using cached MarkupSafe-2.1.1-cp38-cp38-win_amd64.whl (17 kB)
Collecting colorama; platform_system == "Windows"
  Using cached colorama-0.4.6-py2.py3-none-any.whl (25 kB)
Collecting zipp>=0.5
  Using cached zipp-3.10.0-py3-none-any.whl (6.2 kB)
Installing collected packages: MarkupSafe, Werkzeug, itsdangerous, colorama, click, zipp, importlib-metadata, Jinja2, flask
Successfully installed Jinja2-3.1.2 MarkupSafe-2.1.1 Werkzeug-2.2.2 click-8.1.3 colorama-0.4.6 flask-2.2.2 importlib-metadata-5.0.0 itsdangerous-2.1.2 zipp-3.10.0
WARNING: You are using pip version 20.1.1; however, version 22.3.1 is available.
You should consider upgrading via the 'c:\users\elcot\documents\flask_app\env\scripts\python.exe -m pip install --upgrade pip' command.
(env) C:\Users\ELCOT\Documents\flask_app>
```

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app - Notepad
File Edit Format View Help
from flask import Flask, request, url_for, redirect, render_template, jsonify, abort
import pandas as pd
import pickle
import numpy as np
import json
from sklearn.preprocessing import StandardScaler

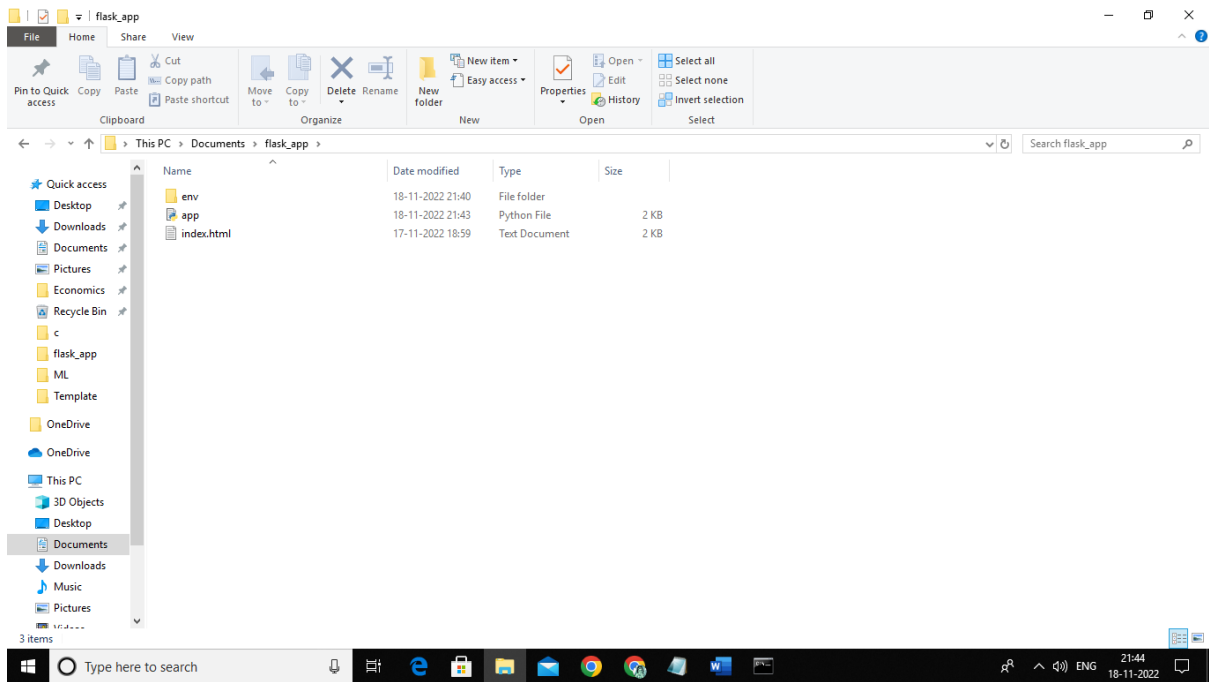
app = Flask(__name__)
f_myfile = open('myfile.pickle', 'wb')
cols = ['location', 'state', 'do', 'ph', 'Conductivity', 'bod', 'na', 'fc']
@app.route('/')
def home():
    return render_template("index.html")

@app.route('/predict', methods=['POST'])
def predict():
    scale = StandardScaler()
    df = pd.read_csv("static/data/water_data.csv")
    df = scale.fit(df.drop(columns="Potability", axis=1))
    int_features = [x for x in request.form.values()]
    final = np.array(int_features)
    data_unseen = pd.DataFrame([final], columns = cols)
    data_unseen_scaled = scale.transform(data_unseen)
    prediction = model.predict(data_unseen_scaled)
    prediction = int(prediction[0])
    # return render_template('index.html', pred=prediction)
    return jsonify({'potable':prediction})

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

```
index.html - Notepad
File Edit Format View Help

<html>
<body style="background-color:blue;">
<center>WATER QUALITY PREDICTION</center>
<style>
</style>
</body>
<body>
  <center><div class="header">
  <center><div class="header1"><font color="#FF0000" font.family="Fascinate Inline"size="5">
<br><br><br><br>
  <form class="main" action="/login" method="post">
  <br>
  <center>
  <li><input type="text" name="year" placeholder="Enter Year"/></li>
  <li><input type="text" name="do" placeholder="Enter D.O"/></li>
  <li><input type="text" name="ph" placeholder="Enter PH"/></li>
  <li><input type="text" name="co" placeholder="Enter Conductivity"/></li>
  <li><input type="text" name="bod" placeholder="Enter B.O.D"/></li>
  <li><input type="text" name="na" placeholder="Enter Nitratenen"/></li>
  <li><input type="text" name="tc" placeholder="Enter Total Coliform"/></li>
  <li><input type="submit" name="logbtn" value="Predict"/></li>
  </center>
  </form>
</body>
</html>
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WARNING: You are using pip version 20.1.1; however, version 22.3.1 is available.
You should consider upgrading via the 'c:\users\elcot\documents\flask_app\env\scripts\python.exe -m pip install --upgrade pip' command.

(env) C:\Users\ELCOT\Documents\flask_app>set FLASK_APP=app.py

(env) C:\Users\ELCOT\Documents\flask_app>flask run
Usage: flask run [OPTIONS]
Try 'flask run --help' for help.

Error: While importing 'app', an ImportError was raised:

Traceback (most recent call last):
  File "c:\users\elcot\documents\flask_app\env\lib\site-packages\flask\cli.py", line 218, in locate_app
    __import__(module_name)
  File "c:\users\elcot\documents\flask_app\app.py", line 2, in <module>
    import pandas as pd
ModuleNotFoundError: No module named 'pandas'

(env) C:\Users\ELCOT\Documents\flask_app>
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(env) C:\Users\ELCOT\Documents\flask_app>set FLASK_APP=app.py

(env) C:\Users\ELCOT\Documents\flask_app>flask run
Usage: flask run [OPTIONS]
Try 'flask run --help' for help.

Error: While importing 'app', an ImportError was raised:

Traceback (most recent call last):
  File "c:\users\elcot\documents\flask_app\env\lib\site-packages\flask\cli.py", line 218, in locate_app
    __import__(module_name)
  File "c:\users\elcot\documents\flask_app\app.py", line 2, in <module>
    import pandas as pd
ModuleNotFoundError: No module named 'pandas'

(env) C:\Users\ELCOT\Documents\flask_app>pip install pandas
Collecting pandas
  Using cached pandas-1.5.1-cp38-cp38-win_amd64.whl (11.0 MB)
Collecting python-dateutil>=2.8.1
  Using cached python_dateutil-2.8.2-py2.py3-none-any.whl (247 kB)
Collecting pytz>=2020.1
  Using cached pytz-2022.6-py2.py3-none-any.whl (498 kB)
Collecting numpy>=1.20.3; python_version < "3.10"
  Using cached numpy-1.23.4-cp38-cp38-win_amd64.whl (14.7 MB)
Collecting six>=1.5
  Using cached six-1.16.0-py2.py3-none-any.whl (11 kB)
Installing collected packages: six, python-dateutil, pytz, numpy, pandas
Successfully installed numpy-1.23.4 pandas-1.5.1 python-dateutil-2.8.2 pytz-2022.6 six-1.16.0
WARNING: You are using pip version 20.1.1; however, version 22.3.1 is available.
You should consider upgrading via the 'c:\users\elcot\documents\flask_app\env\scripts\python.exe -m pip install --upgrade pip' command.

(env) C:\Users\ELCOT\Documents\flask_app>
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Select Command Prompt - flask run
File "C:\Users\elcot\documents\flask_app\env\lib\site-packages\flask\cli.py", line 218, in locate_app
    import _module_name
File "C:\Users\elcot\documents\flask_app\app.py", line 2, in <module>
    import pandas as pd
ModuleNotFoundError: No module named 'pandas'

(env) C:\Users\elcot\documents\flask_app>pip install pandas
Collecting pandas
  Using cached pandas-1.5.1-cp38-cp38-win_amd64.whl (11.0 MB)
Collecting python-dateutil>=2.8.1
  Using cached python_dateutil-2.8.2-py2.py3-none-any.whl (247 kB)
Collecting pytz>=2020.1
  Using cached pytz-2022.6-py2.py3-none-any.whl (498 kB)
Collecting numpy>=1.20.3; python_version < "3.10"
  Using cached numpy-1.23.4-cp38-cp38-win_amd64.whl (14.7 MB)
Collecting six>=1.5
  Using cached six-1.16.0-py2.py3-none-any.whl (11 kB)
Installing collected packages: six, python-dateutil, pytz, numpy, pandas
Successfully installed numpy-1.23.4 pandas-1.5.1 python-dateutil-2.8.2 pytz-2022.6 six-1.16.0
WARNING: You are using pip version 20.1.1; however, version 22.3.1 is available.
You should consider upgrading via the 'c:\users\elcot\documents\flask_app\env\scripts\python.exe -m pip install --upgrade pip' command.

(env) C:\Users\elcot\documents\flask_app>pip install scikit-learn
Collecting scikit-learn
  Using cached scikit_learn-1.1.3-cp38-cp38-win_amd64.whl (7.5 MB)
Collecting scipy>=1.3.2
  Using cached scipy-1.9.3-cp38-cp38-win_amd64.whl (39.8 MB)
Requirement already satisfied: numpy>=1.17.3 in c:\users\elcot\documents\flask_app\env\lib\site-packages (from scikit-learn) (1.23.4)
Collecting joblib>=1.0.0
  Using cached joblib-1.2.0-py3-none-any.whl (297 kB)
Collecting threadpoolctl>=2.0.0
  Using cached threadpoolctl-3.1.0-py3-none-any.whl (14 kB)
Installing collected packages: scipy, joblib, threadpoolctl, scikit-learn
Successfully installed joblib-1.2.0 scikit-learn-1.1.3 scipy-1.9.3 threadpoolctl-3.1.0
WARNING: You are using pip version 20.1.1; however, version 22.3.1 is available.
You should consider upgrading via the 'c:\users\elcot\documents\flask_app\env\scripts\python.exe -m pip install --upgrade pip' command.

(env) C:\Users\elcot\documents\flask_app>flask run
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
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← → ↻ ⌂ 🔍 http://127.0.0.1:5000

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Enter Year

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Enter D.O

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Enter PH

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Enter Conductivity

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Enter B.O.D

•

Enter Nitratene

•

Enter Total Coliform

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Predict

