**Aim**: Design Weather App using Flask.

**Program:** Top of Form

Bottom of Form

import requests

from flask import Flask, render\_template, request

app = Flask(\_\_name\_\_)

def get\_weather(location=''):

url = f'https:\_/wttr.in/{location}?format=j1'

try:

response = requests.get(url)

data = response.json()

# Extract key weather information

current = data['current\_condition'][0]

location\_info = data['nearest\_area'][0]

return {

'location': f"{location\_info['areaName'][0]['value']}, {location\_info['country']

[0]['value']}",

'temperature': f"{current['temp\_C']}°C",

'description': current['weatherDesc'][0]['value'],

'humidity': f"{current['humidity']}%",

'wind\_speed': f"{current['windspeedKmph']} km/h"

}

except Exception as e:

return None

@app.route('/', methods=['GET', 'POST'])

def weather\_app():

weather\_data = None

error = None

if request.method \_= 'POST':

city = request.form.get('city', '').strip()

if city:

weather\_data = get\_weather(city)

if not weather\_data:

error = f"Could not fetch weather for {city}"

return render\_template('wttr\_weather.html',

weather\_data=weather\_data,

error=error)

if \_\_name\_\_ \_= '\_\_main\_\_':

app.run(debug=True)  
  
**Index.html**<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Weather Lookup\_/title>

<style>

body {

font-family: Arial, sans-serif;

max-width: 500px;

margin: 0 auto;

padding: 20px;

text-align: center;

}

.weather-card {

background-color: #f4f4f4;

border-radius: 10px;

padding: 20px;

margin-top: 20px;

box-shadow: 0 4px 6px rgba(0,0,0,0.1);

}

input, button {

margin: 10px 0;

padding: 10px;

width: 100%;

}

.error {

color: red;

margin-top: 10px;

}

\_/style>

\_/head>

<body>

<h1>Weather Lookup\_/h1>

<form method="POST">

<input type="text" name="city" placeholder="Enter City Name" required>

<button type="submit">Get Weather\_/button>

\_/form>

{% if error %}

<div class="error">\_{ error \_}\_/div>  
{% endif %} {% if weather\_data %}

\_{ weather\_data.location \_}\_/h2>

\_{ weather\_data.temperature \_}\_/h3>

\_{ weather\_data.description \_}\_/p>

Humidity: \_{ weather\_data.humidity \_}\_/p>

Wind Speed: \_{ weather\_data.wind\_speed \_}\_/p> \_/div> {% endif %} \_/body> \_/html>

**Output:**

