

```
File Edit Selection View Go Run Terminal Help
app.py - IBM - Visual Studio Code

EXPLORER
IBM
  > __pycache__
  > env
  > templates
    bg.jpg
    chance.html
    index.html
    nochance.html
    sprint_2.py
  app.py
  chance.png
  homepage.png
  nochance.png
  rainfall.pkl
  REPORT.docx
  scale.pkl
  weather.csv

app.py 5 X
1 import numpy as np
2 import pickle
3 import joblib
4 import matplotlib
5 import matplotlib.pyplot as plt
6 import time
7 import pandas
8 import os
9 from flask import Flask, request, jsonify, render_template
10 app = Flask(__name__)
11 model = pickle.load(open('c:/Users/dell/OneDrive/Desktop/IBM/rainfall.pkl', 'rb'))
12 scale = pickle.load(open('c:/Users/dell/OneDrive/Desktop/IBM/scale.pkl', 'rb'))
13
14 @app.route('/')
15 def home():
16     return render_template('index.html')
17 @app.route('/predict', methods=['POST', 'GET'])
18 def predict():
19     # reading the inputs given by the user
20     input_feature=[x for x in request.form.values()]
21     features_values=[np.array(input_feature)]
22     names = ["MinTemp", "MaxTemp", "Rainfall", "WindGustSpeed", "WindSpeed9am", "WindSpeed3pm", "Humidity9am", "Humidity 3pm",
23             "Pressure9am", "Pressure 3pm", "Temp9am", "Temp3pm", "RainToday",
24             "WindGustDir", "WindDir9am", "WindDir3pm"]
25     data = pandas.DataFrame(features_values, columns=names)
26     data = scale.fit_transform(data)
27     data = pandas.DataFrame(data, columns = names)
28     prediction=model.predict(data)
29     print(prediction)
30     if prediction == [1]:
31         return render_template('nochance.html')
32     else:
33         return render_template('chance.html')
```

```
File Edit Selection View Go Run Terminal Help
index.html - IBM - Visual Studio Code

EXPLORER
IBM
  > __pycache__
  > env
  > templates
    bg.jpg
    chance.html
    index.html
    nochance.html
    sprint_2.py
  app.py
  chance.png
  homepage.png
  nochance.png
  rainfall.pkl
  REPORT.docx
  scale.pkl
  weather.csv

index.html 5 X
1 <html>
2 <head>
3 <title>
4 Rainfall Prediction
5 </title>
6 </head>
7 <body background="https://images.unsplash.com/photo-1556485689-33e55ab56127?ixlib=rb-4.0.3&ixid=MmwxMjA3fD06B8M4bWwG90byWVmd1fBc"
8 <div class="login">
9 <center><h1 style="color: white;">RAINFALL PREDICTION</h1></center>
10 <form action="{{ url_for('predict')}}" method="post">
11 <style></head>
12
13 <center><label for="MinTemp" name="MinTemp" style="color: white;">MINTEMP:</label>
14 <input type="text" name="MinTemp" placeholder="MinTemp"></center><br>
15 <center><label for="MaxTemp" name="MaxTemp" style="color: white;">MAXTEMP:</label>
16 <input type="text" name="MaxTemp" placeholder="MaxTemp"></center><br>
17 <center><label for="Rainfall" name="Rainfall" style="color: white;">RAINFALL:</label>
18 <input type="text" name="Rainfall" placeholder="Rainfall"></center><br>
19 <center><label for="WindGustSpeed" name="WindGustSpeed" style="color: white;">WINDGUSTSPEED:</label>
20 <input type="text" name="WindGustSpeed" placeholder="WindGustSpeed"></center><br>
21 <center><label for="WindSpeed9am" name="WindSpeed9am" style="color: white;">WINDSPEED9AM:</label>
22 <input type="text" name="WindSpeed9am" placeholder="WindSpeed9am"></center><br>
23 <center><label for="WindSpeed3pm" name="WindSpeed3pm" style="color: white;">WINDSPEED3PM:</label>
24 <input type="text" name="WindSpeed3pm" placeholder="WindSpeed3pm"></center><br>
25 <center><label for="Humidity9am" name="Humidity9am" style="color: white;">HUMIDITY9AM:</label>
26 <input type="text" name="Humidity9am" placeholder="Humidity9am"></center><br>
27 <center><label for="Humidity3pm" name="Humidity3pm" style="color: white;">HUMIDITY3PM:</label>
28 <input type="text" name="Humidity3pm" placeholder="Humidity3pm"></center><br>
29 <center><label for="Pressure9am" name="Pressure9am" style="color: white;">PRESSURE9AM:</label>
30 <input type="text" name="Pressure9am" placeholder="Pressure9am"></center><br>
31 <center><label for="Pressure3pm" name="Pressure3pm" style="color: white;">PRESSURE3PM:</label>
32 <input type="text" name="Pressure3pm" placeholder="Pressure3pm"></center><br>
33 <center><label for="Temp9am" name="Temp9am" style="color: white;">TEMPERATURE9AM:</label>
34 <input type="text" name="Temp9am" placeholder="Temp9am"></center><br>
35 <center><label for="Temp3pm" name="Temp3pm" style="color: white;">TEMPERATURE3PM:</label>
36 <input type="text" name="Temp3pm" placeholder="Temp3pm"></center><br>
37 <center><label for="RainToday" style="color: white;">RAINTODAY:</label> <select id="RainToday" name="RainToday
```

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>Rainfall prediction</title>
5 </head>
6 <body background="https://wallpaperaccess.com/full/688373.jpg" text="black" style="background-position: center; background-repeat: no-repeat;">
7   <div class="login">
8     <center><h1 style="color: White;">EXPECT RAIN TODAY</h1></center>
9     <center><h2 style="color: White;"><pre>
10       For agriculture, it's better not to start now.
11       Few crops like: Wheat, Gram, Barley, Peas, Oats, Chickpea, Linseed, Mustard, etc.\
12       can be grown!
13       General Purposes:
14       Please stay indoors, Stay safe!
15     </pre></h2></center>
16 </body>
17 </html>
```

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>Rainfall prediction</title>
5 </head>
6 <body background="https://images.unsplash.com/photo-1421878615130-7c5243914117?ixlib=rb-4.0.3&ixid=MmwdtjA3fD8B8P#bwaG90by1wYnd1fHx8" style="background-position: center; background-repeat: no-repeat;">
7   <div class="login">
8     <center><h1 style="color: White;">No chances of rain today, enjoy your outing.</h1></center>
9     <center><h2 style="color: White;"><pre>
10       For agriculture:
11       Irrigation can be done.
12       Crops like Cucumber, Pumpkin, Bitter melon, Watermelon, Muskmelon, Sugarcane, Groundnut, Pulses, can be grown!
13       For general purposes:
14       Great day for outing, do your routine!
15     </pre></h2></center>
16 </body>
17 </html>
```