import numpy as np

import pickle

import joblib

import matplotlib

import matplotlib.pyplot as plt

import time

import pandas

import os

from flask import Flask, request, jsonify, render\_template

app = Flask (\_name\_)

model = pickle.load(open('C:/Users/SmartbridgePC/Desktop/AIML/Guided projects/rainfall prediction/Rainfall.pkl', 'rb'))

scale = pickle.load(open('C:/Users/SmartbridgePC/Desktop/AIML/Guided projects/rainfall prediction/scale.pkl', 'rb'))

@app.route('/')# route to display the home page

def home():

return render\_template('index.html') #rendering the home page

@app.route('/predict', methods=["POST", "GET"])# route to show the predictions in a web UI

def predict():

#reading the inputs given by the user

input\_feature=[x for x in request.form.values()]

features\_values [np.array(input\_feature)]

names=[['Location', 'MinTemp', 'MaxTemp', 'Rainfall', 'WindGustSpeed',

'WindSpeed9am', 'WindSpeed3pm, 'Humidity9am, 'Humidity3pm',

'Pressure9am', 'Pressure3pm', 'Temp9am', 'Temp3pm', 'RainToday',

'WindGustDir", "Wind Dir9am', 'WindDir3pm, 'year', 'month', 'day']]

data = pandas.DataFrame(features\_values,columns-names)

data = scale.fit\_transform(data)

data = pandas.DataFrame(data, columns names)

# predictions using the loaded model file

prediction-model.predict(data)

pred\_prob model.predict\_proba (data)

print(prediction)

if prediction == "Yes":

return render\_template("chance.html")

else:

return render\_template("nochance.html")

#showing the prediction results in a UI

if \_\_name\_\_=="\_\_\_\_main\_\_":