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| Team ID | PNT2022TMID25561 |
| Project Name | Efficient Water Quality Analysis and Prediction using Machine Learning |

Python code

import numpy as np

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

app = Flask( name )

model = pickle.load(open('wqi.pkl','rb')) @app.route('/',methods=['GET'])

def home():

return render\_template("index.html") @app.route('/login',methods = ['POST']) def login():

year = request.form["year"] do = request.form["do"]

ph = request.form["ph"] co = request.form["co"] bod = request.form["bod"] na = request.form["na"] tc = request.form["tc"] total =

[[int(year),float(do),float(ph),float(co),float(bod),float(na),float(tc)]] y\_pred = model.predict(total)

y\_pred = y\_pred[0]

if(y\_pred >= 95 and y\_pred <=100):

return render\_template("index.html",showcase = "Excellent, The Predicted Value is "+str(y\_pred))

elif(y\_pred >=89 and y\_pred <=94):

return render\_template("index.html",showcase = "Very Good, The Predicted Value is "+str(y\_pred))

elif(y\_pred >=80 and y\_pred <=88):

return render\_template("index.html",showcase = "Good, The Predicted Value is "+str(y\_pred))

elif(y\_pred>=65 and y\_pred<=79):

return render\_template("index.html",showcase = "Fair, The Predicted Value is "+str(y\_pred))

elif(y\_pred>=45 and y\_pred<=64):

return render\_template("index.html",showcase = "Marginal, The Predicted Value is "+str(y\_pred))

else:

return render\_template("index.html",showcase = "Poor, The Predicted Value is "+str(y\_pred))

if name == ' main ':

app.run(debug = True,port = 5000)