Team ID	PNT2022TMID53671
Project Name	Efficient Water Quality Analysis and Prediction using Machine Learning

Python code

```
import numpy as np
from flask import
Flask,render_template,requestimport 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
PredictedValue is "+str(y_pred))
    elif(y_pred >=89 and y_pred <=94):
        return render_template("index.html",showcase = "Very Good, The
PredictedValue is "+str(y_pred))
    elif(y_pred >=80 and y_pred <=88):
```

```
        return render_template("index.html",showcase = "Good, The
PredictedValue is "+str(y_pred))
    elif(y_pred>=65 and y_pred<=79):
        return render_template("index.html",showcase = "Fair, The
PredictedValue is "+str(y_pred))
    elif(y_pred>=45 and y_pred<=64):
        return render_template("index.html",showcase = "Marginal, The
PredictedValue is "+str(y_pred))
    else:
        return render_template("index.html",showcase = "Poor, The
PredictedValue is "+str(y_pred))

if__name__== '__main__':
```