Team ID	PNT2022TMID38291
Project Name	Efficient Water Quality Analysis and Prediction using Machine Learning

Python code

```python
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)
```