election_model.py - C:\Users\filto\Desktop\data_glacier\Flask2\election_model.py (3.10.0)

File Edit Format Run Options Window Help

```
import numpy as np
import pandas as pd
import pickle
from sklearn.model_selection import train_test_split
from sklearn.linear_model import LogisticRegression
from sklearn.metrics import classification_report

election_data = pd.read_csv('2020_Election_Demographics.csv')

sex = pd.get_dummies(election_data['Sex'],drop_first=True)
marital_status = pd.get_dummies(election_data['Marital Status'],drop_first=
race = pd.get_dummies(election_data['Race'],drop_first=True)
age = pd.get_dummies(election_data['Age'],drop_first=True)
education = pd.get_dummies(election_data['Education'],drop_first=True)
income = pd.get_dummies(election_data['Income'],drop_first=True)

election_data2 = pd.concat([sex, race, age, education, income, marital_stat

logmodel = LogisticRegression()
logmodel.fit(election_data2.drop('Candidate', axis=1), election_data2['Cand

# Saving model to disk
pickle.dump(logmodel, open('logmodel.pkl','wb'))

# Loading model to compare the results
logmodel2 = pickle.load(open('logmodel.pkl','rb'))
print(logmodel2.predict([[1, 0, 0, 1, 0, 0, 1, 1, 0, 1, 0, 0, 1, 0]]))
```

election_app.py - C:\Users\filto\Desktop\data_glacier\Flask2\election_app.py (3.10.0)

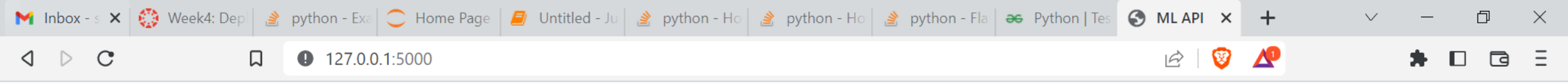
File Edit Format Run Options Window Help

```
import numpy as np
from flask import Flask, request,render_template
import pickle
from transitioner import Transitioner

election_app = Flask(__name__)
logmodel = pickle.load(open('logmodel.pkl', 'rb'))

@election_app.route('/')
def home():
    return render_template('index2.html')

@election_app.route('/predict',methods=['POST'])
def predict():
    '''
    For rendering results on HTML GUI
    '''
    features = [x for x in request.form.values()]
    #final_features = [np.array(features)]
    prediction = logmodel.predict([Transitioner(features)])

    output = prediction[0]

    return render_template('index2.html', prediction_text='Your choice for presi

if __name__ == "__main__":
    election_app.run(debug=True)
```

IDLE Shell 3.11.0

File Edit Shell Debug Options Window Help

```
Python 3.11.0 | packaged by conda-forge | (main, Oct 25 2022, 06:12:32) [MSC v.1
929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
====== RESTART: C:\Users\filto\Desktop\data_glacier\Flask2\election_app.py =====
 * Serving Flask app 'election_app'
 * Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment.
 Use a production WSGI server instead.
 * Running on http://127.0.0.1:5000
Press CTRL+C to quit
 * Restarting with stat
```



Predict Your 2020 Election Vote

Sex | Race | Age | Education | Income | Marital Status | Predict

Predict Your 2020 Election Vote

Female | White | 60 | Bachelors | 30000 | Married | Predict

Your choice for president should be Trump