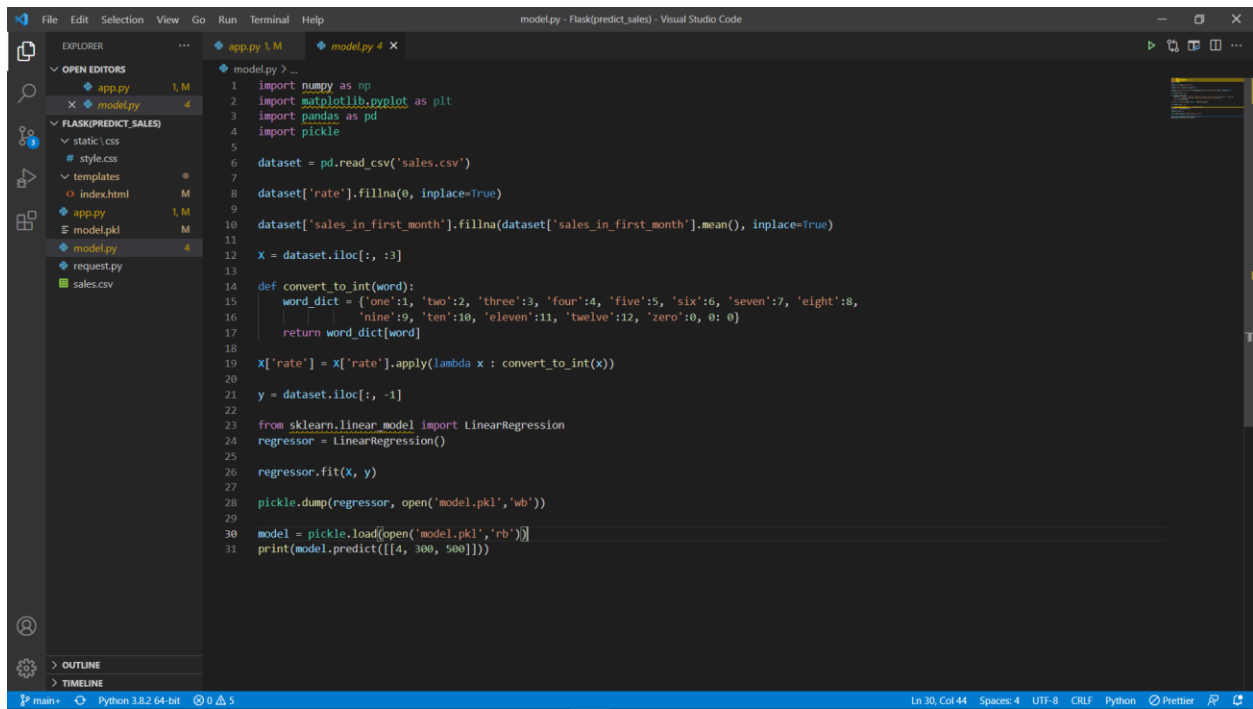# Deployement on Flask

Name:Mukhammadjon Kholmirzaev
**Batch Code: LISUM01**
Submission date: 04.07.21
Submitted to:
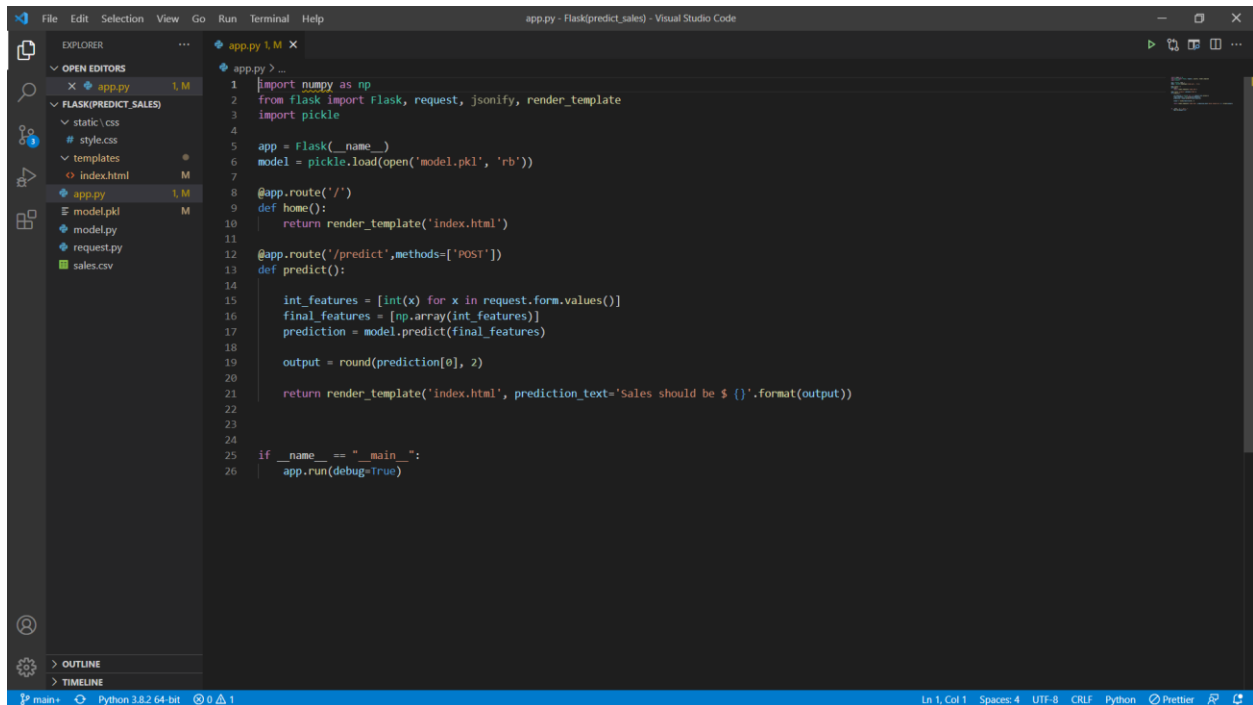https://github.com/Mukhammadj/Flask_sales_prediction
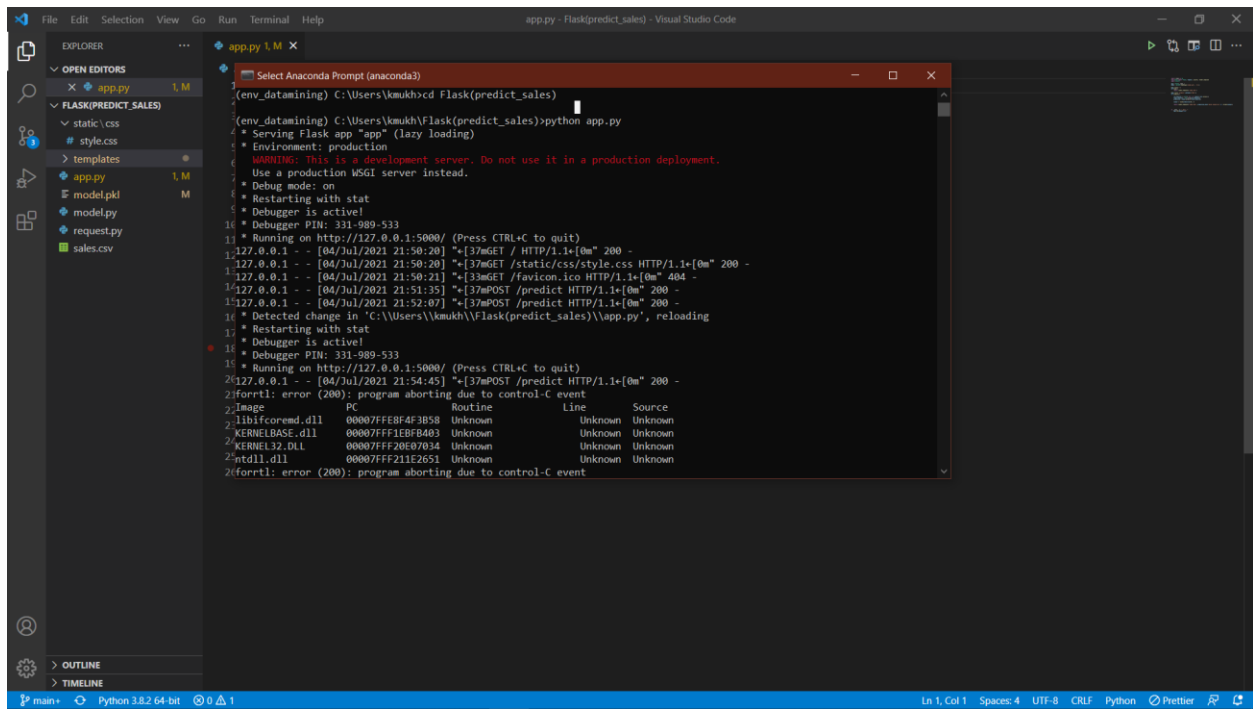_project

A model ready to deploy



```python
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
import pickle

dataset = pd.read_csv('sales.csv')

dataset['rate'].fillna(0, inplace=True)

dataset['sales_in_first_month'].fillna(dataset['sales_in_first_month'].mean(), inplace=True)

X = dataset.iloc[:, :3]

def convert_to_int(word):
    word_dict = {'one':1, 'two':2, 'three':3, 'four':4, 'five':5, 'six':6, 'seven':7, 'eight':8,
                 'nine':9, 'ten':10, 'eleven':11, 'twelve':12, 'zero':0, 0: 0}
    return word_dict[word]

X['rate'] = X['rate'].apply(lambda x : convert_to_int(x))

y = dataset.iloc[:, -1]

from sklearn.linear_model import LinearRegression
regressor = LinearRegression()

regressor.fit(X, y)

pickle.dump(regressor, open('model.pkl','wb'))

model = pickle.load(open('model.pkl','rb'))
print(model.predict([[4, 300, 500]]))
```

Developing a web service app.py



```python
import numpy as np
from flask import Flask, request, jsonify, render_template
import pickle

app = Flask(__name__)
model = pickle.load(open('model.pkl', 'rb'))

@app.route('/')
def home():
    return render_template('index.html')

@app.route('/predict',methods=['POST'])
def predict():

    int_features = [int(x) for x in request.form.values()]
    final_features = [np.array(int_features)]
    prediction = model.predict(final_features)

    output = round(prediction[0], 2)

    return render_template('index.html', prediction_text='Sales should be $ {}'.format(output))


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

Running the program on cmd

# Results