Name: Paula McCree-Bailey, Deployment on Flask
Batch Code: LISUM47
Submission Date: 8/16/2025
Submission to: Data Glacier

1 – Create model.py file (not shown) to save the model for the sklearn toy dataset “Diabetes”.

2 – Create the app.py file (shown below) which takes the input from Postman to provide predicted level of progression of diabetes.

app.py

```python
def diabetes_predict():
    '''
    For rendering results on HTML GUI
    '''
    try:
        # Load model
        model = pickle.load(open('model_pmb.pkl', 'rb'))

        # Get parameters from query string
        age = request.args.get('age')
        gender = request.args.get('gender')
        bmi = request.args.get('bmi')
        bp = request.args.get('bp')
        s1 = request.args.get('s1')
        s2 = request.args.get('s2')
        s3 = request.args.get('s3')
        s4 = request.args.get('s4')
        s5 = request.args.get('s5')
        s6 = request.args.get('s6')

        # Convert inputs to float
        input_data = [float(age), float(gender), float(bmi), float(bp),
                      float(s1), float(s2), float(s3), float(s4), float(s5), float(s6)]

        # Create DataFrame with correct column names
        test_df = pd.DataFrame([input_data], columns=['age', 'sex', 'bmi', 'bp', 's1', 's2', 's3', 's4', 's5', 's6'])

        # Predict
        pred_level = model.predict(test_df)

        return jsonify({'Predicted disease progression': round(float(pred_level[0]), 2)})

    except Exception as e:
        return jsonify({'error': str(e)})

# driver function
if __name__ == '__main__':
    app.run(debug=True)
```

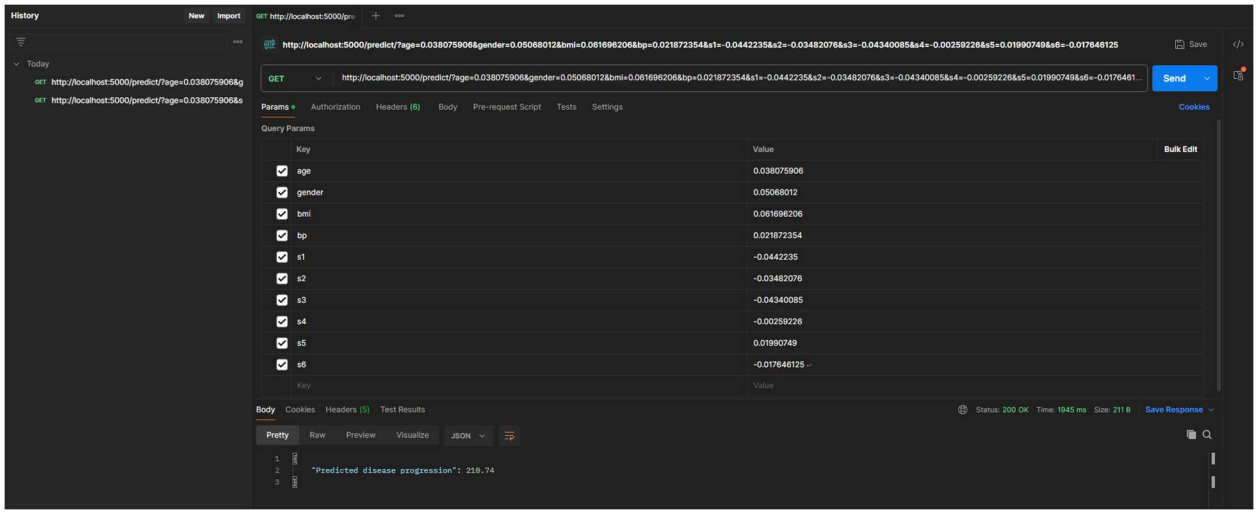
3 – Run app.py. Copy the local http location (http://127.0.0.1:5000).

Anaconda Prompt - python a

```
(base) C:\Users\paula>cd Documents\Module4

(base) C:\Users\paula\Documents\Module4>cd Flask-Deployment_pmb

(base) C:\Users\paula\Documents\Module4\Flask-Deployment_pmb>cd Flask-Deployment_pmb

(base) C:\Users\paula\Documents\Module4\Flask-Deployment_pmb\Flask-Deployment_pmb>python model.py
Predicted disease progression: 210.74

(base) C:\Users\paula\Documents\Module4\Flask-Deployment_pmb\Flask-Deployment_pmb>python app.py
 * Serving Flask app '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
```

Name: Paula McCree-Bailey, Deployment on Flask
Batch Code: LISUM47
Submission Date: 8/16/2025
Submission to: Data Glacier

4 – Using Postman. Enter the feature names under Key and value under Values in Postman for testing. Once all values are entered, press Send.



The predicted value is displayed below.