## **DEPLOYMENT ON FLASK**

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I have selected the data from the below link.

It has two data attributes – income, happiness index.

https://www.scribbr.com/statistics/simple-linear-

 $\frac{regression/\#:\text{``:text=Dataset\%20for\%20simple\%20linear\%20regression\%20\%28.csv\%29\%20Load\%20the,\%3C-}{\text{``continuous of the properties o$ 

%20lm%20%28happiness%20~%20income%2C%20data%20%3D%20income.data%29

```
import pickle
import pandas as pd
import numpy as np
from sklearn.model_selection import train_test_split
from sklearn.linear_model import LinearRegression

csvFile = pd.read_csv('incomedata.csv')

X = csvFile['income']
X=np.reshape(X_(-1_1))

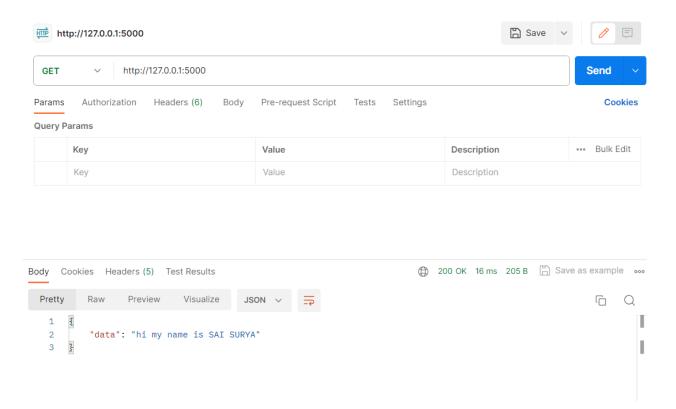
y = csvFile['happiness']
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.3, random_state=100)

model=LinearRegression()
model=LinearRegression()
model=LinearRegression('model.pickle'_\( 'wb') \)
pickle.dump(model_open('model.pickle'_\( 'wb') \)
```

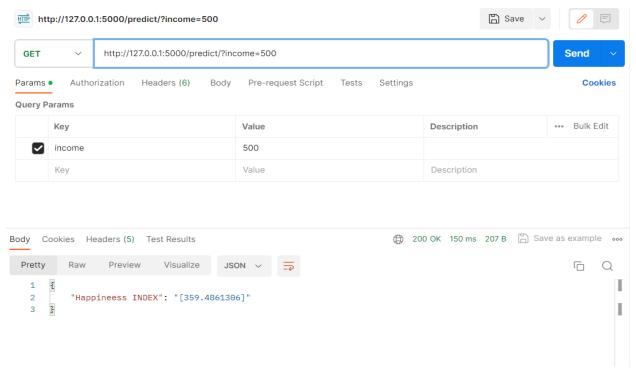
THE ABOVE CODE IS USED TO SAVE THE LINEAR MODEL IN PICKLE FORMAT

```
from flask import Flask, jsonify, request
import pickle
import pandas as pd
app=Flask(__name__)
@app.route('/', methods=['GET','POST'])
def home():
    if(request.method == 'GET'):
        data ='hi my name is SAI SURYA'
        return jsonify({'data':data})
@app.route('/predict/')
def happiness_predict():
    model=pickle.load(open('model.pickle','rb'))
    income=request.args.get('income')
    test_df=pd.DataFrame({'INCOME':[income]})
    pred_happiness=model.predict(test_df)
    return jsonify({'Happineess INDEX':str(pred_happiness)})
if __name__ =='__main__':
    app.run(debug=_True)
```

The above code is used to give the routes to the flask.



After running the above python script on postman the output will be as follows as flask follows the 1<sup>st</sup> route when none is mentioned.



ABOVE INPUT ATTRIBUTE IS GIVEN IN POSTMAN INCOME =500 , WHICH GIVES OUPTUT HAPINESS INDEX