Name: Runtian Wang Batch code: LISUM14

Submission data: 10/28/2022

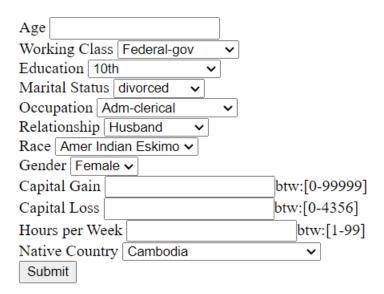
Submitted to: https://github.com/runtia

Firstly, I run the module, this will train a module and save it in the pickle.

```
D:\pythonProject\Flask_deployment>py preprocessing.py
{'workclass': {' ?': 0, 'Federal-gov': 1, 'Local-gov': 2, 'Never-worked': 3, 'Private': 4, 'Self-emp-inc': 5, 'Self-emp-not-inc': 6, 'State-gov': 7, 'Without-pay': 8}, 'race': {' Amer-Indian-Eskimo': 0, 'Asian-Pac-Islander': 1, 'B lack': 2, 'Other': 3, 'White': 4}, 'education': {' 10th': 0, '11th': 1, '12th': 2, '1st-4th': 3, '5th-6th': 4, '7th-8th': 5, '9th': 6, 'Assoc-acdm': 7, 'Assoc-voc': 8, 'Bachelors': 9, 'Doctorate': 10, 'HS-grad': 11, 'Masters': 12, 'Preschool': 13, 'Prof-school': 14, 'Some-college': 15}, 'marital-status': {' Divorced': 0, 'Married-AF-spouse': 1, 'Married-civ-spouse': 2, 'Married-spouse-absent': 3, 'Never-married': 4, 'Separated': 5, 'Widowed': 6}, 'occup ation': {' ?': 0, 'Adm-clerical': 1, 'Armed-Forces': 2, 'Craft-repair': 3, 'Exec-managerial': 4, 'Farming-fishing': 5, 'Handlers-cleaners': 6, 'Machine-op-inspct': 7, 'Other-service': 8, 'Priv-house-serv': 9, 'Prof-specialty': 10, 'Protective-serv': 11, 'Sales': 12, 'Tech-support': 13, 'Transport-moving': 14}, 'relationship': {' Husband': 0, 'Not-in-family': 1, 'Other-relative': 2, 'Own-child': 3, 'Ummarried': 4, 'Wife': 5}, 'gender': {' Female': 0, 'Male': 1}, 'native-country': {' ?': 0, 'Cambodia': 1, 'Canada': 2, 'China': 3, 'Columbia': 4, 'Cuba': 5, 'Dominican-Republic': 6, 'Ecuador': 7, 'El-Salvador': 8, 'England': 9, 'France': 10, 'Germany': 11, 'Greece': 12, 'Guatemala': 13, 'Haiti': 14, 'Holand-Netherlands': 15, 'Honduras': 16, 'Hong': 17, 'Hungary': 18, 'India': 19, 'Iran': 20, 'Ireland': 21, 'Italy': 22, 'Jamaica': 23, 'Japan': 24, 'Laos': 25, 'Mexico: 26, 'Nicaragua': 27, 'Outlying-US(Guam-USVI-etc)': 28, 'Peru': 29, 'Philippines': 30, 'Poland': 31, 'Portugal': 32, 'Puerto-Rico': 33, 'Scotland': 34, 'South': 35, 'Taiwan': 36, 'Thailand': 37, 'Trinadad&Tobago': 38, 'United-States': 39, 'Vietnam': 40, 'Yugoslavia': 41}, 'income': {' <=50K': 0, '>50K': 1}}
Desicion Tree using Gini Index
Accuracy is 83.13031016480704
```

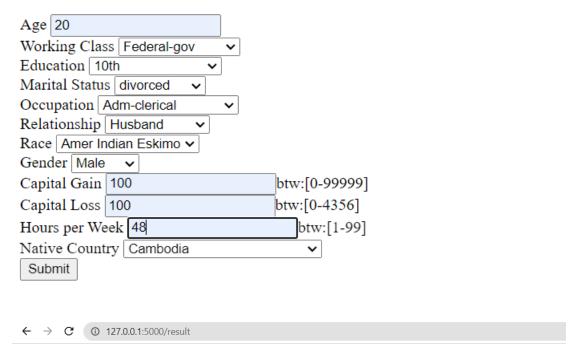
Next, I run the flask, this will create an API for the website. So I can see the ML prediction on the website.

Income Prediction Form



Then, I can input some value in the blank, making the module to predict the result

Income Prediction Form



Income less that 50K