

HW2 Report  
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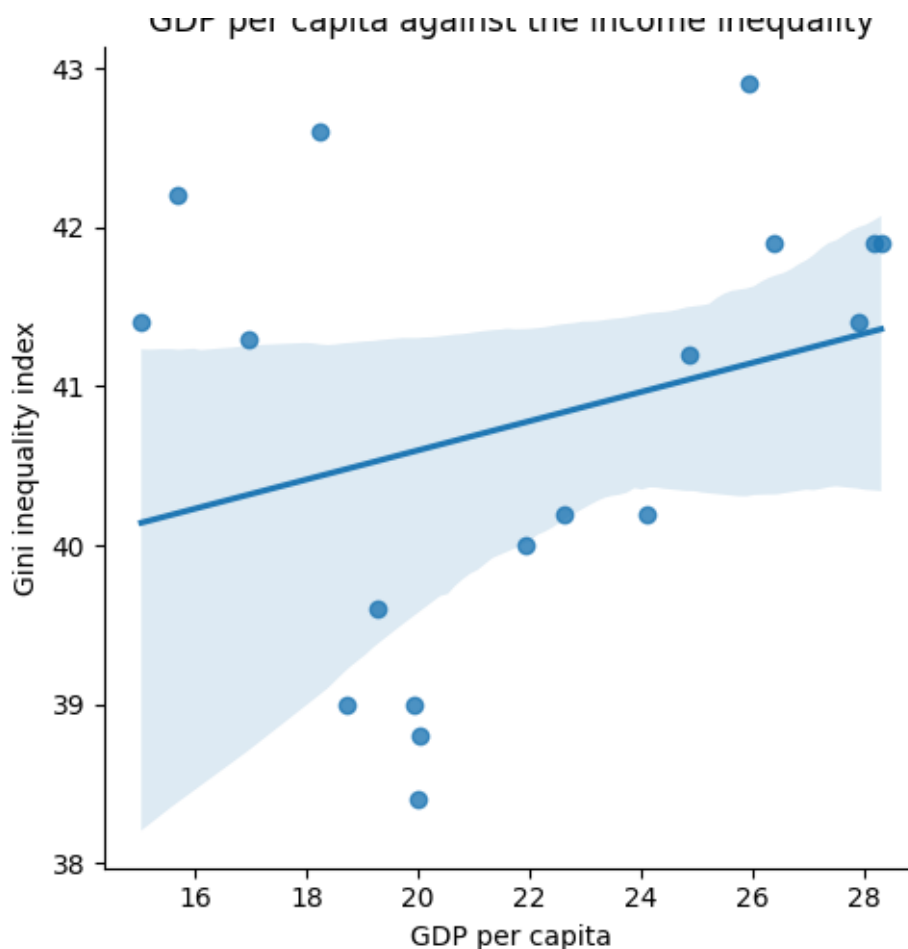
My research focuses on the relation of GDP per capita and the income inequality in Turkey. I have used World Bank API to collect the data of GDP per capita and Gini index which measures income inequality among a given society. I have matched the data with pandas module's dataframes. Then, I used the drop functions of pandas module to clean the data. The years with missing values are dropped from the function. Remaining data was corresponding to 2002-2019 interval along with the year 1994. Therefore, 1994 is isolated from the 2002-2019 interval. Moreover, in the years between 1994 and 2002, Turkish economy had multiple crisis, industrialization, privatization and an IMF Stand-by agreement, without forgetting the transformed political environment from small party coalitions to strong one party government. For these reasons, I have dropped the 1994 from the dataframe to increase the internal validity of my regression.

For this homework, I have created MyReg linear regression function.

Regression coefficient  $b_0, \hat{B}$  = [38.76592527], [ 0.09160774]

Standard Errors for  $b_0$  and  $\hat{B}$ : 1.78574459, 0.08006969

Conf interval of  $b_0$ : (35.26586587, 42.26598467) and  $\hat{B}$  ( -0.0653288, 0.24854433)



My results are consistent with the regression function I have imported from sklearn module.