CSSM 502 – HW 2 Report

In this homework, I investigated relationship between "Suicide mortality rate (per 100,000 population)" and “gdppc” (GDP per Capita). I used 2019 data from World Bank API.

My control variable is “income level” of a country. I fixed this variable because I think that it has impact on independent variable (increase in income level will decrease suicide rate) and dependent variable (increase in income level will increase gdppc). Therefore, I only look at the countries which has “HIC” (High Income Level) income level flag.

My hypothesis is that there is a negative relationship between "Suicide mortality rate (per 100,000 population)" and “gdppc”. I think increase in gdppc will decrease suicide mortality rate.

If we perform regression analysis by help of **linearRegression()** function which I code, regression results will be as following:

	Coefficients	**Standard Error**	**Lower 95%**	**Upper 95,0%**
Intercept	11,080032	2,22015960	6,61845425	15,5416098
gdppc	1.88557081e-06	4.37043412e-05	-8.59415909e-05	8.97127325e-05

If we look at the %95 Confidence Interval (CI) for gdpcc, we will see that Confidence Interval includes the 0 value. Therefore, we reject the null hypothesis. There is no significant (positive or negative) relationship between this two variables.