

CASE STUDY 010

[Python]

World's GDP Analysis

Difficulty Level: 1 of 3

Disclaimer: the dataset used in this case study was downloaded from The World Bank's website. The dataset was modified and prepared to simplify the analysis in this case study, but it can be downloaded in its original form [here](#).

World Bank Open Data provides free and open access to global development data. I encourage you to explore the data and look for interesting indicators.

You are a Data Scientist doing research of how the world has developed in the last ten years, analysing real world data from The World Bank. Your objective is to find interesting patterns in given data.

You have been supplied a dataset with 10 years of percentage GDP growth, from 2006 to 2015. The data for 2016 is not publish yet.

GDP growth (annual %)

Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2010 U.S. dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

Source World Bank national accounts data, and OECD National Accounts data files.



Your analysis must be able to address the following questions:

1. What was the biggest increase in the GDP in the last ten years?
2. What was the biggest decrease in the GDP in the last ten years?
3. How many times the GDP has increased at least 2%?
4. How many times the GDP has decreased?
5. What was the average growth of the last ten years?
6. Suppose that The Word's GDP of 2004 and 2005 (both not present in the data provided) was respectively 45,619 and 47,207, expressed in billion dollars. Calculate the 2005 increase and check if the growth is above or below the average of the period between 2006 and 2015.
7. Which real world event is represented in this dataset?

Good luck!

Difficulty note: this is a difficult assignment. Do not be surprised that there will be lots of nuances we have not covered off in the courses. But just like in the Real Life – there will be things training has not prepared you for and you will need to do research to find how to solve the problems at hand. If you get stuck, check the clues file.