

# Big Data Analytics – Homework 3

Due 9 am, Friday September 20

This assignment will help you improving you skills pulling data from **a single table**. Questions have been designed to force you using the concepts of regular expressions and nested queries. Please Enjoy

1. What countries have a total GDP above the mean?
2. How many countries are above the mean on each region?
3. How many regions have more than 65% of their countries with a GDP per capita above 6000?
4. List all the countries with a GDP that is 40% below the mean or less.
5. List all the countries with a GDP per capita that is between 40% and 60% the mean GDP per capita
6. Which letter is the most popular first letter among all the countries? (i.e. what is the letter that starts the largest number of countries?)
7. What are the countries with a coast to area ratio in the top 50?
  - a. From these countries, how many of them belong to the bottom 30 countries by GDP per capita?
  - b. From these countries, how many of them belong to the top 30 countries by GDP per capita?
8. Is the average Agriculture, Industry, Service distribution of the top 20 richest countries different than the one of the lowest 20?
9. How much higher is the average literacy level in the 20% percentile of the richest countries relative to the poorest 20% countries?
10. From all the countries with a coast ratio at least 50% lower than the mean, which % of them stay in Africa?
  - a. How many of them start with the letter C?